



UNIVERSITY OF
CALGARY

SCHULICH SCHOOL
OF ENGINEERING

UNIVERSITY OF CALGARY

Annual Report

for the year ended March 31, 2017

prepared for the Government of Alberta

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1. Accountability Statement

September 16, 2017

The University of Calgary's Annual Report for the year ended March 31, 2017 was prepared under the Board's direction in accordance with the Fiscal Planning and Transparency Act and ministerial guidelines established pursuant to the Post-Secondary Learning Act. All material economic, environmental or fiscal implications of which we are aware have been considered in the preparation of this report.

[Original Signed by Gord Ritchie, Chair, Board of Governors]

2. Management's Responsibility for Reporting

The University of Calgary's management is responsible for the preparation, accuracy, objectivity and integrity of the information contained in the Annual Report including the financial statements, performance results and supporting management information. Systems of internal control are designed and maintained by management to produce reliable information to meet reporting requirements. The system is designed to provide management with reasonable assurance that: transactions are properly authorized; are executed in accordance with all relevant legislation, regulations and policies; reliable financial records are maintained; and assets are properly accounted for and safeguarded.

The Annual Report has been developed under the oversight of the Board of Governors and is prepared in accordance with the Fiscal Planning and Transparency Act and the Post-secondary Learning Act.

The Auditor General of the Province of Alberta, the institution's external auditor appointed under the Auditor General Act, performs an annual independent audit of the consolidated financial statements which are prepared in accordance with Canadian public sector accounting standards.

[Original Signed by Elizabeth Cannon, President and Vice-Chancellor]

[Original Signed by Linda Dalgetty, Vice-President (Finance and Services)]

3. Message from the Chair

On behalf of the Board of Governors, I am pleased to present the University of Calgary's annual report to the Minister of Advanced Education for the year ended March 31, 2017. It highlights the achievements of our students, faculty, and staff in fulfillment of our mandate to support Campus Alberta and its goals of accessible, affordable and quality learning opportunities for Albertans; enhanced learner transitions into and movement within the adult learning system; assisting learners to succeed in their chosen learning pathways; and facilitating lifelong participation in the adult learning system by all who have the desire and skills to succeed.

Through our *Eyes High* vision and the priorities articulated in our Academic and Research Plans, we continued a transformation in 2016-17 that is greatly enhancing the impact of the institution on our city, our province, and society at large. This transformation involves all aspects of our educational and research enterprises as well as how we engage with our communities. These changes position the University of Calgary to be a strategic partner with the Government of Alberta.

All of the work we do at the University of Calgary is focused on fulfilling the three foundational commitments of *Eyes High*: sharpen focus on research and scholarship, enrich the quality and breadth of learning, and integrate the university with the community. Among the most significant initiatives we undertook to fulfill these commitments in 2016-17 were to develop an Indigenous Strategy; implement our Academic Renewal Strategy; establish the College of Discovery, Creativity and Innovation; and launch "Energize: The Campaign for *Eyes High*".

Development of our Indigenous Strategy is the result of extensive efforts by an Indigenous Task Force. It consisted of an elder advisory council that provided wisdom, counsel, and guidance; a steering committee responsible for enhancing dialogue with Canadian First Nations, Inuit, and Metis; and a working group that engaged in extensive dialogue with traditional knowledge keepers and elders. The goal of the Indigenous Strategy will be to increase First Nations, Métis and Inuit student enrolment and strengthen our bonds to provincial indigenous communities.

Attracting 100 young scholars to the university through our Academic Renewal Strategy is an investment that is accelerating the hiring of new professors across our institution in advance of retirements. Some of the hiring is taking place in important multi-disciplinary "cluster" areas such as Aboriginal, Sustainability, Energy, Computer Simulations and Analytics, Leadership and Entrepreneurship, Mental Health, and Genomics. Twenty-five positions are in the Cumming School of Medicine to build on the school's success as a teaching and research powerhouse.

Few initiatives on campus are as bold in their inspiration as the College for Discovery, Creativity and Innovation (CDCI). The CDCI is an arm of the Taylor Institute for Teaching and Learning dedicated to the promotion of high-impact approaches to student learning. Its signature educational experience – a new Global Challenges course – will bring together students from different faculties to find solutions to challenges facing society.

Launch of 'Energize: The Campaign for *Eyes High*' as part of our 50th anniversary celebration is the most ambitious campaign in our history. Achieving our \$1.3 billion goal will pave the way for investments in research and scholarships that would not otherwise be possible. Already more than half way to the goal, the campaign will allow for investments in things like

entrepreneurship and international experiences, and research priorities such as brain and mental health, arts and culture, and safe, clean and secure energy.

These are just a few of the initiatives we undertook in 2016-17 that contributed to the University of Calgary being ranked the number one young university in both Canada and North America according to the Times Higher Education. We ranked sixth among Canada's top research universities in 2016 according to RESEARCH Infosource Inc. We also ranked fifth in Canada in the highly respected CWTS Leiden Ranking in 2016. This is a global ranking offering key insights into the scientific performance of over 800 major universities worldwide.

We achieved these accomplishments during a year dominated by a downturn in the Alberta economy. Low energy prices, weaker economic activity, and the highest unemployment in 20 years kept Alberta inflation contained. While this partially offset the impact of the lower currency exchange rate, it increased the costs of foreign purchases for specialized research equipment and library acquisitions.

The year was also marked by important changes proposed to the legislation governing post-secondary institutions in Alberta. Government reviews of the *Post-Secondary Learning Act* and the *Public Service Employee Relations Act* culminated in Bill 7 that will have an impact on the associations representing University of Calgary professors, graduate students and post-doctoral scholars. Furthermore, an amendment to the *Public Post-secondary Institutions' Tuition Fees Regulation* extended a tuition freeze that made the cost of education more affordable for students at the University of Calgary.

Successfully addressing the many opportunities and challenges we faced in 2016-17 would not have been possible without the support of the Government of Alberta. A welcome increase to our provincial operating grant helped address costs associated with growing student demand. Additionally, a firm commitment by the Government of Alberta to upgrade the MacKimmie Block and Tower provided assurance of a much-needed expansion of teaching and student space within the heart of main campus.

On behalf of the Board of Governors, I would like to thank the Government of Alberta for its support in 2016-17, and acknowledge our entire community for their contributions to our *Eyes High* journey. I would encourage you to read this report to learn more about how teaching, research and creative activity at the University of Calgary are making a difference in our community, our country and our world.

[Original Signed by Gord Ritchie, Acting Chair, Board of Governors]

4. Operational Overview

This section describes significant changes in the institutional environment from the projections made in the 2016 Comprehensive Institutional Plan. Key drivers include important changes to economic, labour, legislative, adult learning and research environments. This operational overview also includes a discussion of major changes to programming, in terms of overall increases or decreases as a result of trends.

Economic Environment

The economic environment was dominated by a downturn as the global oil price shock continued to work its way through the Alberta economy in 2016-17. After declining by an estimated 4.0 percent in 2015, real GDP fell by 3.8 percent in 2016. This marked the first time since 1982-83 that the economy contracted in successive years.¹ The economic decline had a negative effect on provincial revenue, leading the Government of Alberta to project a \$10.4 billion deficit for 2016-17.² Despite deteriorating economic conditions, the provincial budget confirmed 2.0 percent grant increases for Campus Alberta. The federal government also announced significant investments in *Budget 2016*, including a \$95.0 million per year increase to the budgets of the federal granting councils and establishment of a \$2.0 billion Post-Secondary Institutions Strategic Investment Fund (SIF).³ The University of Calgary received \$78.0 million in federal support for eight (8) SIF projects for a combined federal and provincial investment of \$160.0 million. While lower energy prices and weak economic activity kept inflation contained, the currency exchange rate increased the cost of foreign purchases for library acquisitions and research equipment and services.

Labour Environment

After posting its weakest performance in over two decades in 2014 and 2015 (aside from the 2009 recession year), the Canadian labour market did not do much better in 2016.⁴ Notwithstanding a significant decline in employment, Alberta's labour force continued to expand. The result was a growing unemployment rate in Calgary, which surpassed the national rate for the first time since reaching a 20-year high of 10.3 percent in November 2016.⁵ A high unemployment rate and improving prospects in other parts of Canada meant that more non-resident workers left the province. Notwithstanding a slower economy, job prospects remained positive for university professors.⁶ After dropping slightly over the last decade, the number of professors employed in Canada increased in recent years. The increase can be explained by changes in government spending, the number of university-age young people, and the school attendance rate of young people aged 20 to 29. Serious labour shortages remained in certain disciplines, including engineering, computer science and medicine.⁶ Shortages stemmed largely from competition from universities in the United States and the rest of Canada. Changes in the labour environment are important because the University of Calgary both supplies and places demands on the labour market.

¹ Government of Alberta, Fiscal Plan Economic Outlook: Annex <https://www.alberta.ca/budget.aspx>

² Government of Alberta, Fiscal Plan 2016 <https://www.alberta.ca/budget.aspx>

³ Government of Canada, Growing the Middle Class, Budget 2016, <http://www.budget.gc.ca/2016/docs/plan/toc-tdm-en.html>

⁴ The Conference Board of Canada, Canadian Outlook 2016 Long-Term Economic Forecast

⁵ 2016 Labour Force Characteristics, Government of Canada, Statistics Canada

⁶ Government of Canada, Service Canada, Occupations in Social Science, Education, Government Service and Religion, May 2015

Legislative Environment

The legislative environment was marked by important changes proposed to the legislation governing post-secondary institutions. On December 11, 2015, the Government of Alberta passed the *Public Sector Compensation Transparency Act*, which requires public sector bodies to disclose compensation information online for employees earning over \$125,000.⁷ The majority of those on the University of Calgary's compensation disclosure list are academic staff, which is reflective of the institution's teaching, learning and research mandate. The list also includes management and support staff who play key roles managing an organization considered to be one of Calgary's largest employers.

Prompted by a constitutional challenge in Saskatchewan, the Supreme Court of Canada released its decision finding that the right to strike is fundamental to the collective bargaining process and is constitutionally protected.⁸ The impact of this decision was felt in Alberta where the Court of Queen's Bench of Alberta declared that the strike prohibition in the *Public Service Employee Relations Act* (PSERA) is without force. To determine the impact of the Court's decision, Advanced Education undertook a review the *PSLA* and the PSERA. The review culminated in Bill 7.⁹ Bill 7 is expected to have an impact on how the University of Calgary governs labour relationships with associations representing professors, graduate students and post-doctoral scholars.

The Government of Alberta extended an amendment to the *Public Post-secondary Institutions' Tuition Fees Regulation*, essentially freezing tuition for the 2016-17 and 2017-18 academic years at a level no greater than the fees charged during 2014-15.¹⁰ Continuation of the freeze allowed government to work with stakeholders to review the tuition and fee model in Alberta. An estimated 250,000 full-time and part-time students and apprentices saved roughly \$16 million a year through the freeze on tuition and fees.

Adult Learning Environment

Calgary is the largest city in Alberta and the fourth largest municipality in Canada. Despite the recent economic downturn, Calgary had the highest growth rate of any metropolitan area in Canada over the past five years. According to the 2016 census, the Calgary metropolitan area reached a population of 1.4 million people, which is a 14.6 percent increase over 2011. The City of Calgary reached a population of 1.2 million people, which is a 13.0 percent increase over 2011. These numbers far surpass the national growth rate of five percent.¹ Historically, Calgary's population has increased steadily over time, even during times when oil prices were low. In 2016, the University of Calgary saw a two percent increase in its undergraduate application numbers and in 2017 that number increased to nine percent, to date. The 2017 increase is due, in part, to President Trump's executive order proposing to ban travellers from seven countries from entering the United States. Shortly after it was announced, the Association of Public and Land-Grant Universities, the Association of American Universities, the European University Association, and Universities Canada issued statements critical of the executive order.¹¹ Universities in Canada continued to welcome and support students, faculty and staff from around the world.

⁷ Government of Alberta, *Public Sector Compensation Transparency Act*

⁸ Supreme Court of Canada, *Judgement of the Supreme Court of Canada, Saskatchewan Federation of Labour v. Saskatchewan*

⁹ Government of Alberta, *Bill 7, An Act to Enhance Post-Secondary Academic Bargaining*

¹⁰ Government of Alberta, *Public Post-secondary Institutions' Tuition Fees Regulation*

¹¹ University Affairs, *Canada's universities "deeply concerned" by Trump travel ban*, Anqi Shen, January 30, 2017

Research Environment

News for Alberta's research institutions was mixed in 2016-17. After funding declines under the previous federal government, Budget 2016 promised a significant influx of money to the federal research granting councils. The Government of Canada invested an additional \$95.0 million per year (i.e., including \$19.0 million in indirect costs) in the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council of Canada (NSERC) and the Social Sciences and Humanities Research Council (SSHRC). Combined with funds promised in Budget 2015, the three granting council are receiving a total of \$141.0 million. This is the single greatest annual funding increase in more than a decade.

Alberta's Budget 2016 saw the amalgamation of the four Alberta Innovates corporations into a single entity concurrently with grants being reduced by \$33.0 million. While amalgamation was a step in the right direction, the decrease in funding will be a challenge. The Alberta Innovates corporations fund university graduate students, post-doctoral scholars, some professor salaries, and collaborative research projects. With over 30,000 students, 500 post-doctoral scholars, and 1,800 faculty actively engaged in discovery, creativity, and innovation at the University of Calgary, the institution's ability to be a major driver for both economic prosperity and quality of life for Albertans will be affected by the grant reduction.

5. Goals, Priorities and Expected Outcomes

Our academic and research priorities guide our actions and define the nature of our discoveries. They serve as a roadmap to the creation of a new brand of academy in which teaching and research interact in new ways to promote discovery, creativity and innovation. Evidence of the transformative power of this interaction is highlighted within this section where we demonstrate that our academy is creating graduates who are becoming global citizens and leaders of their respective communities, and where we are matching our research strengths with areas of unmet need in society for new knowledge, creative expression, and innovation.

5.1 ACADEMIC OUTCOMES

We identified seven (7) academic priorities in our 2012 Academic Plan and three (3) priorities in our 2012 Research Plan that serve as a roadmap to our *Eyes High* vision. The following is a brief description of each priority, a list of strategic initiatives undertaken in 2016-17 to advance the priority, the status of each initiative (i.e., delayed, in progress, complete, or ongoing), and the percent complete as of March 31, 2017.

5.1.1 TALENT ATTRACTION, DEVELOPMENT AND RETENTION

Universities can be distinguished by the talent they attract and retain – at all levels of the academy – undergraduate and graduate students, faculty and staff. The objective of this priority is to revitalize and re-energize our talent pool at all levels of the academy so that Alberta can compete in a rapidly changing global economy for people, ideas, investment, and markets. As a result of our focus on this priority in 2016-17, we attracted, developed, and retained staff necessary to compete in this global economy – talent essential to the achievement of our *Eyes High* vision of being one of the top five research universities in Canada (Table 1).

Table 1 – Talent Attraction, Development and Retention

Strategic Initiative	Status	Percent Complete
Develop an Indigenous strategy in conjunction with our faculties, the University of Calgary Native Centre, and the wider Indigenous community that supports teaching, learning, research and the integration of the university in the community as it relates to Indigenous populations	In Progress	90
Continue to implement the recently completed institutional Mental Health Strategy	Ongoing	100
Implement the recommendations in the report on the Prevention of Student to Student Sexual Harassment and Sexual Violence	Ongoing	100
Hire 100 new academic staff as outlined in the 2015 Comprehensive Institutional Plan	In Progress	90
Increase the number of scholarships available for undergraduate and graduate students	Complete	100

5.1.2 TEACHING AND RESEARCH INTEGRATION

The objective of this priority is to enable our students to integrate research and experiential learning into their ways of knowing and learning about the world around them. As a result of

our focus on this priority in 2016-17, our students have been immersed in a culture of inquiry, which is preparing them to take their places in the workforce of tomorrow (Table 2).

Table 2 – Teaching and Research Integration

Strategic Initiative	Status	Percent Complete
Celebrate the opening of the Taylor Institute for Teaching and Learning in April, 2016	Complete	100
Develop a strategic plan for the Scholarship of Teaching and Learning component of the Taylor Institute	Complete	100
Ensure programming of the three groups (Scholarship of Teaching and Learning, Educational Development, and Learning Technologies) for the Taylor Institute is fully operational and integrated	Complete	100
Develop further the concept of the College of Discovery, Creativity, and Innovation (CDCI) of the Taylor Institute and implement further pilot programs in the winter term of 2017	Complete	100
Provide new resources to support the development of diverse forms of experiential learning across our academic programs	Ongoing	100
Support each faculty in implementing evidence-based responses to the results of the 2014 NSSE, in collaboration with the Educational Development Unit	Complete	100
Develop a comprehensive framework and begin implementation of an enhanced approach to assessing teaching effectiveness across our academic community. The evidence-based framework will bring a more consistent approach to documenting the teaching effectiveness of individual academic staff in annual reports, merit, tenure and promotion processes, and will include indicators of how teaching and learning quality are supported at departmental, faculty and institutional levels	In Progress	90
Evaluate and expand the dual-credit pilot project with our high school educational partners. The dual credit project provides credit for high school students in specific courses co-developed by a university professor and high school teacher for both a grade 12 course and introductory course at the university	Complete	100

5.1.3 INTERDISCIPLINARITY

The objective of this priority is to create a scholarly environment where students, staff, and faculty can not only advance their disciplinary expertise, but also experience the rewards of collaborating across fields to either solve important problems or create new artistic expressions. As a result of our focus on this priority in 2016-17, students are better prepared for advanced study and research and success in new and growing industries that are built on melding ideas from diverse disciplines (Table 3).

Table 3 – Interdisciplinarity

Strategic Initiative	Status	Percent Complete
Continue to implement all six strategic research themes: Energy Innovations for Today and Tomorrow; New Earth Space Technologies; Infection, Inflammation and Chronic Diseases; Human Dynamics in a Changing World; Engineering Solutions for Health; and Brain and Mental Health	Complete	100
Continue to explore models for interdisciplinary units leading to the creation of shared intellectual and physical spaces between faculties	Ongoing	100

5.1.4 LEADERSHIP

The objective of this priority is to inspire a culture of leadership at the University of Calgary where each individual can live up to his or her potential to influence actions, strive for

excellence, and support the growth of others. As a result of our focus on this priority in 2016-17, we are continuing to identify future leaders from across campus at an early stage and preparing them for leadership roles in their future careers (Table 4).

Table 4 – Leadership

Strategic Initiative	Status	Percent Complete
Determine next steps for the pilot of the Graduate College, based on assessment of results to date	Complete	100
Implement and assess the Faculty of Graduate Studies <i>Alberta Vision for Innovation</i> leadership and innovation initiative for all graduate students	Ongoing	100

5.1.5 INTERNATIONALIZATION

Refer to Section seven (7) for outcomes related to internationalization.

5.1.6 CONNECTION WITH COMMUNITY

The objective of this priority is to serve our community and reflect its values through the expertise of our faculty, staff, students, and alumni. As a result of our focus on this priority in 2016-17, we connected with our community for the purpose of discovering new ideas and creating new art and cultural expressions, and translating new knowledge into innovative applications that will be of mutual benefit to the university and our community (Table 5).

Table 5 – Connection with Community

Strategic Initiative	Status	Percent Complete
Publicly launch our \$1.3 billion Energize the Campaign for <i>Eyes High</i> in conjunction with the celebration of our 50th anniversary	Complete	100
Host a variety of community-based events to celebrate the 50th anniversary of the University of Calgary, including Alumni weekend	Complete	100
Host the 2016 meeting of the Congress of the Humanities and Social Sciences, which will bring together scholars from across Canada and around the world in conjunction with our 50th anniversary. As part of this event, host six Big Thinking Lectures, six faculty-led interdisciplinary symposia, and welcome a full day of RedX Talks focusing on the first anniversary of the Truth and Reconciliation Commission Report. The goal of RedX Talks is to build and facilitate discussion towards conciliation	Complete	100

5.1.7 SUSTAINABILITY

The objective of this priority is to allow our campus to be a model for responsible growth of our curriculum, research, built environments, open spaces, and daily operational and business practices. As a result of our focus on this priority in 2016-17, we continued to lead the development of sustainable practices and sought new ways of applying them in order to have the most significant impact (Table 6).

Table 6 – Sustainability

Strategic Initiative	Status	Percent Complete
Implement the identified priorities of the Institutional Sustainability Strategy (including education and research for sustainability framework, the sustainability engagement framework, and the administration and operational framework)	Ongoing	100
Launch an embedded Interdisciplinary Certificate in Sustainability	Complete	100
Complete our third Sustainability Tracking and Assessment Rating System (STARS) assessment and publish our third biennial sustainability report	Complete	100

5.2 RESEARCH OUTCOMES

We identified three (3) research priorities within our 2012 Research Plan that serve as a roadmap to our *Eyes High* vision (i.e., Match our Strengths with Opportunities, Increase our Research Capacity, and Create a Dynamic Environment to Promote Research Excellence).

5.2.1 MATCH OUR STRENGTHS WITH OPPORTUNITIES

The objective of this priority is to match our areas of strength with areas of unmet need in society for new knowledge, creative expression, and innovation. As a result of our focus on this priority in 2016-17, we applied the tremendous breadth, depth, and excellence of scholarly expertise resident at the University of Calgary to address critical societal issues that align strongly with provincial priorities (Table 7).

Table 7 – Match our Strengths with Opportunities

Strategic Initiative	Status	Percent Complete
Support implementation plans launched by the confederation of scholars for each of the six priority research themes: Energy Innovations for Today and Tomorrow; New Earth Space Technologies; Infection, Inflammation and Chronic Diseases; Human Dynamics in a Changing World; Engineering Solutions for Health; and Brain and Mental Health	Complete	100
Submit 6 NSERC CREATE Proposals in areas that support the strategic research themes	Complete	100
Submit our Canada First Research Excellence Fund application “Global Research Initiative on Sustainable Unconventional Resources”	Complete	100

5.2.2 INCREASE OUR RESEARCH CAPACITY

The objective of this priority is to increase the supply of highly qualified personnel in Alberta capable of doing the work needed to advance the frontiers of knowledge and build and maintain the infrastructure needed to support leading-edge research. As a result of our focus on this priority in 2016-17, we strengthened and improved our research environment (Table 8).

Table 8 – Increase our Research Capacity

Strategic Initiative	Status	Percent Complete
Complete the recruitment of three new Natural Sciences and Engineering Research Council (NSERC) Industrial Research Chairs to expand the research program of our Canada Excellence Research Chair in Materials Engineering for Unconventional Oil Reservoirs	In Progress	-
Complete the Round 9 Canada Foundation for Innovation (CFI) competition by submitting grants totaling \$44.0 million	Complete	100
Hire 100 new academic staff as outlined in the 2015 Comprehensive Institutional Plan	In Progress	90

5.2.3 CREATE A DYNAMIC ENVIRONMENT TO PROMOTE RESEARCH EXCELLENCE

The objective of this priority is to create a dynamic culture and environment that is supportive of the research aspirations of our scholars. As a result of our focus on this priority in 2016-17, our students, faculty, and staff have greater access to research opportunities and they are

learning in an environment that enables them to participate in discovery, creativity, and innovation (Table 9).

Table 9 – Create a Dynamic Environment to Promote Research Excellence

Strategic Initiative	Status	Percent Complete
Explore new models to sustain commercialization of inventions and knowledge mobilization	Complete	100
Explore sustainable funding models for the University of Calgary Field Stations	Complete	100
Implement the Research Management System for digital stewardship of grant applications from initiation through to the award stage	In Progress	40
Create a system to support the development of research data management plans that will soon be a requirement for publicly funded institutions	In Progress	50

5.3 ENROLMENT REPORT

Fall Headcount Enrolment

When the University of Calgary's 2016-17 enrolment plan was presented as part of the 2016 Comprehensive Institutional Plan, we estimated that 31,443 students (headcount) would register in 2016-17 (Table 10). The actual number enrolled was 31,950, which is 508 (1.6 percent) more students than the estimate. This increase is due in part to an increase in applications at the undergraduate level in the Haskayne School of Business and Werklund School of Education. Although enrolment management is an inexact science, an acceptable enrolment variance is typically acknowledged as being within two to three percent of the estimate, which is well within the range of our noted variance for both headcount and FLE. This significant improvement is attributable to a new enrolment management process introduced in fall 2015.

Table 10 – Enrolment by Faculty for 2016-17 (Fall 2016 Headcount)

Faculty / School	Undergraduate			Graduate			Total		
	Target	Actual	Diff	Target	Actual	Diff	Target	Actual	Diff
Arts	6,809	6,835	26	749	711	(38)	7,558	7,546	(12)
Schulich Engineering	3,426	3,506	80	1,190	1,127	(63)	4,616	4,633	17
Environmental Design	-	-	-	298	287	(11)	298	287	(11)
Haskayne Business	2,844	2,979	135	648	659	11	3,492	3,638	146
Kinesiology	810	867	57	86	88	2	896	955	59
Law	371	359	(12)	51	37	(14)	422	396	(26)
Medicine – MD	475	488	13	-	-	-	475	488	13
Medicine – Other	608	623	15	527	485	(42)	1,135	1,108	(27)
Nursing	820	811	(9)	150	122	(28)	970	933	(37)
Science	4,908	4,851	(57)	784	820	36	5,692	5,671	(21)
School of Public Policy	-	-	-	40	48	8	40	48	8
Social Work	507	484	(23)	317	304	(13)	824	788	(36)
Veterinary Medicine	131	119	(12)	77	79	2	208	198	(10)
Werklund Education	851	1,121	270	1,122	1,183	61	1,973	2,304	331
IGP	-	-	-	10	5	(5)	10	5	(5)
Open Studies	1,409	1,407	(2)	70	113	43	1,479	1,520	41
PGME	844	974	130	-	-	-	844	974	130
Sub-total	24,813	25,423	610	6,119	6,068	(51)	30,932	31,490	559
Qatar	486	432	(54)	25	28	3	511	460	(51)
Total	25,299	25,855	556	6,144	6,096	(48)	31,443	31,950	508

*IGP – Interdisciplinary Graduate Programs

**Open Studies, Exchanges and Visiting Students

***PGME – Post Graduate Medical Education

Note: Headcount enrolment is defined as the actual number of students regardless of whether they are enrolled in one course or a full course load. A headcount value of 1.0 means that the student is taking the equivalent of one or more courses. Therefore a student taking a portion of a program generates the same headcount as a student enrolled in a full program. Reporting enrolment in terms of headcounts allows the university to compare itself with institutions outside Alberta where full-time equivalent (FTE) is more common. FTE is defined as students taking a 60.0 percent course load as opposed to a full-load. Further, headcounts are important relative to budget – we teach students, not FLEs – and the headcounts allow us to more appropriately budget for student services (e.g., counselling, advisors, etc.) that are required.

Full-load Equivalent Enrolment

While faculty enrolment targets are established using student headcounts, Full-Load Equivalent (FLE) enrolment remains an important measure to ensure that overall institutional enrolment targets are met. In our 2016 CIP, we estimated that our 2016-17 FLE enrolment would be 27,955. The actual number enrolled was 28,560 FLE, or 605 (2.20 percent) more students than our estimate. The variance aligns with the slight increase in students in specific programs as noted above and is well within the accepted variance range.

Table 11 – Enrolment by Faculty for 2016-17 (Full-load Equivalent)

Faculty / School	Undergraduate			Graduate			Total		
	Target	Actual	Diff	Target	Actual	Diff	Target	Actual	Diff
Arts	5,710	5,731	21	718	680	(38)	6,429	6,411	(18)
Schulich Engineering	3,264	3,340	76	1,034	1003	(31)	4,298	4,343	45
Environmental Design	-	-	-	289	275	(14)	289	275	(14)
Haskayne Business	2,565	2,640	75	614	646	32	3,178	3,286	108
Kinesiology	705	772	67	83	89	6	789	861	72
Law	356	346	(10)	28	23	(5)	384	369	(15)
Medicine – MD	660	676	16	-	-	-	660	676	16
Medicine – Other	517	539	22	498	482	(16)	1,015	1,021	6
Nursing	975	896	(79)	124	108	(16)	1,099	1,004	(95)
Science	4,216	4,139	(77)	754	791	37	4,971	4,929	(42)
School of Public Policy	-	-	-	43	54	11	43	54	11
Social Work	417	412	(5)	296	280	(16)	713	692	(21)
Veterinary Medicine	144	128	(16)	73	76	3	217	204	(13)
Werklund Education	824	1,091	267	1,023	1,108	85	1,847	2,198	351
IGP	-	-	-	8	7	(1)	8	7	(1)
Open Studies	801	853	52	73	116	43	874	969	95
PGME	834	956	122	-	-	-	834	956	122
Sub-total	21,988	22,518	530	5,658	5,736	78	27,646	28,255	609
Qatar	278	281	3	31	25	(7)	309	305	(4)
Total	22,266	22,799	533	5,689	5,761	72	27,955	28,560	605

*IGP – Interdisciplinary Graduate Programs

**Open Studies, Exchanges and Visiting Students

***PGME – Post Graduate Medical Education

Note: Full-Load Equivalent (FLE) enrolment looks at the course load students are enrolled in, with one FLE representing the equivalent of what a standard student taking a standard full load would generate during an academic year. A FLE value of 1.0 means that the student is taking the equivalent of a full course load for their program. A student taking a portion of the program would generate less than 1.0 FLE. Reporting enrolment data as FLEs helps to reflect system capacity and allow enrolment comparisons across various programs and institutions within Alberta.

6. Financial and Budget Information

This Management Discussion and Analysis (“MD&A”) should be read in conjunction with the University of Calgary’s (“the University”) consolidated financial statements and accompanying notes for the year ended March 31, 2017. The MD&A and consolidated financial statements are reviewed and approved by the University’s Board of Governors on the recommendation of the University’s Audit Committee. The University’s consolidated financial statements have been prepared in accordance with Canadian Public Sector Accounting Standards (“PSAS”).

The MD&A is an overview of the University’s financial results for the year ending March 31, 2017 and offers analysis of the University’s:

1. Operating Environment
2. Financial Results
3. Net Assets and Net Financial Assets
4. Capital Expansion and Renewal
5. Areas of Significant Financial Risk

6.1 OPERATING ENVIRONMENT

On April 29, 2016, the University marked its 50th anniversary and was recognized as North America’s top young university. The University was ranked first in both Canada and North America in Times Higher Education (THE) Top 150 under 50 and the Quacquarelli Symonds Limited (QS) World University Rankings.

In large part, this success is driven by the University’s Eyes High strategic vision, which was refined during the fiscal year:

“The University of Calgary is a global intellectual hub located in Canada’s most enterprising city. In this spirited, high-quality learning environment, students will thrive in programs made rich by research, hands-on experiences and entrepreneurial thinking. By 2022, we will be recognized as one of Canada’s top five research universities, fully engaging the communities we both serve and lead.”

We are dedicated to the three foundational commitments established in 2011: 1) sharpen focus on research and scholarship; 2) enrich the quality and breadth of learning; 3) integrate the University with the community.

Our Academic Plan and Research Plan, developed in 2011-12, resulted in seven academic and three research priorities that have provided a roadmap for the achievement of our Eyes High vision. The vision and priorities established at the University are designed to show our community the benefits and rewards of integrating teaching, learning and research in an environment where discovery, creativity, and innovation are central to the mission. Our priorities have guided human, financial, and capital resource allocations for the foreseeable future. This trio of documents (Eyes High Strategy, Academic Plan, Research Plan), produced through broad consultation processes on our campus, has resulted in strong strategic decision-making that has moved the institution forward, while at the same time placed focus on prudent fiscal management.

6.2 FINANCIAL RESULTS

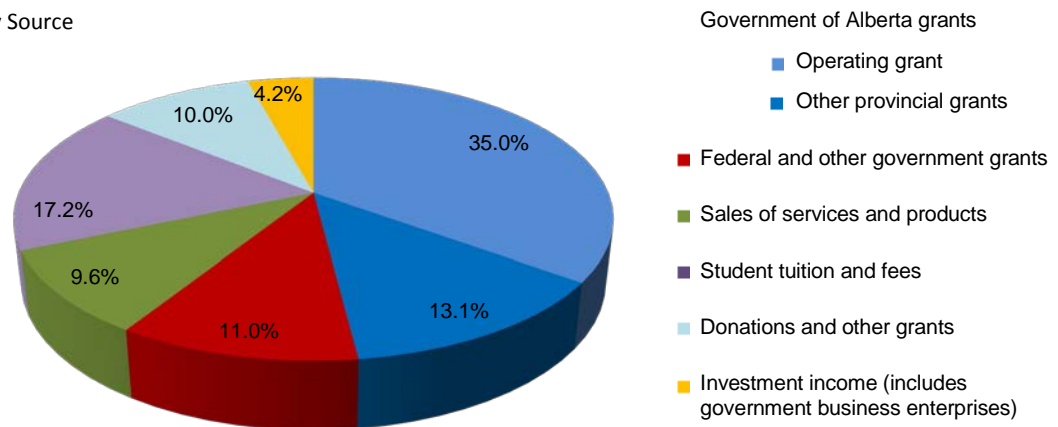
For the year ended March 31, 2017, the University's revenues exceeded expenses by \$4.3 million. This annual operating surplus decreased from the \$11.3 million surplus in 2016 mainly due to increased spending on strategic research, academic, and support initiatives combined with inflationary impacts above operating funding increases.

Total net assets have increased by \$108.0 million from March 31, 2016 as the result of additions to endowments of \$69.5 million, unrealized gains on portfolio investment – restricted for endowments of \$46.2 million, and the annual operating surplus of \$4.3 million, which is offset by a \$12.0 million reduction in unrealized gains on portfolio investments – non-endowment.

REVENUE

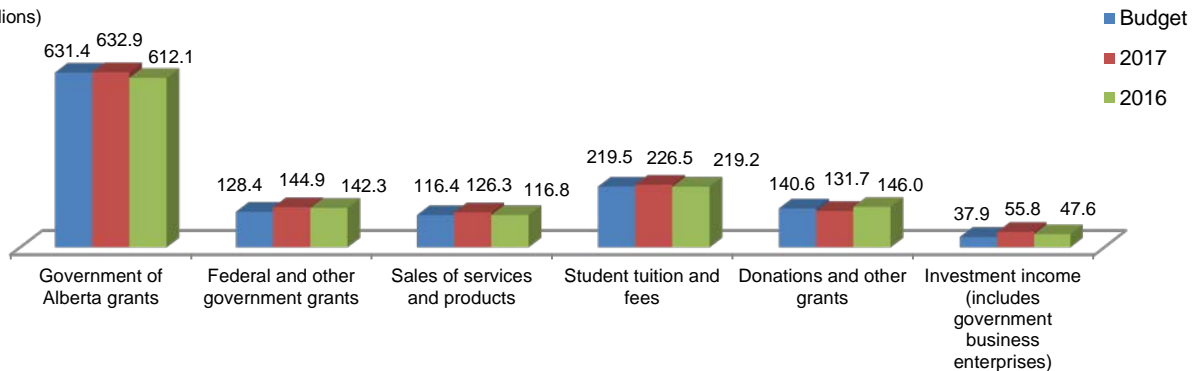
Total revenues for the year ended March 31, 2017, were \$1,318.1 million, an increase of \$34.1 million (2.7%) over the prior year and \$43.9 million (3.4%) over budget. Revenue from the Government of Alberta represented the University's single largest source of income, at 48.0% of total University revenue, and played a key role in the ability to fund University activities. Major components of revenue are as follows:

Figure 1 – Revenue by Source



Revenue

(\$ millions)



Government of Alberta grants

Government of Alberta grant revenue of \$632.9 million was \$20.8 million higher than prior year and in line with budgeted amounts. This increase from prior year was primarily due to additional funding received from the Government of Alberta related to cost of living adjustments of 2.0% applied to the operating grant, funding to compensate for the provincial tuition freeze, and grants for targeted enrolment expansion.

Federal and other government grants

Grant revenue from federal and other government sources of \$144.9 million was \$2.6 million higher than prior year and \$16.5 million higher than budget. The increase from the prior year and budget resulted from higher than anticipated revenue from research and special purpose and trust activities that occurred during the year.

Sales of services and products

Sales of services and products revenue of \$126.3 million was \$9.5 million higher than the prior year and \$9.9 million higher than budgeted expectations primarily as a result of \$5.2 million in one-time cost recoveries received from the province related to housing Fort McMurray evacuees, \$2.0 million in increased Clinical Neurosciences medical fees, \$1.3 million from additional lease revenue, and \$1.0 million in additional Olympic Oval and Kinesiology student service program fees.

Student tuition and fees

Student tuition and fees represent another important component of the University's revenue. For the year-ended March 31, 2017, student tuition and fees of \$226.5 million were \$7.3 million higher than prior year and \$7.0 million higher than budget. The increase is due to approximately 1,000 additional full-load equivalent domestic students enrolled and \$2.0 million in additional international full-load equivalent students tuition and fees, partially offset by \$1.7 million reduction in corporate Continuing Education enrollment as a result of the current economic conditions in Alberta.

Donations and other grants

Donations and other grant revenue of \$131.7 was \$14.3 million lower than prior year and \$8.9 million lower than budgeted. The decrease from prior year and budget is primarily due to lower recognition of donation and other grant revenue from research and special purpose activities specifically funded by donations. The decrease is partially offset by \$6.2 million of unbudgeted income from the University's partnership with Tri-University Meson Facility (TRIUMF) which operates a subatomic physics research facility with eleven other Universities.

Investment income – Including investment loss in government business enterprises

Investment income (including investment loss in government business enterprises ("GBE's")), of \$55.8 million was \$8.2 million higher than prior year and \$17.9 million higher than budget mainly due to \$10.0 million in gains from floating rate notes that matured earlier than expected combined with \$5.8 million in higher than expected endowment income from increased endowment spending, and \$1.8 million in unbudgeted foreign exchange gains offset lower returns on Guaranteed Investment Certificates (GICs). Remaining budget variances are from \$3.4 million in lower than expected losses from investment in GBE's partially offset by lower than budgeted returns on non-endowed investments. The lower than expected losses from GBE's, relate primarily to the start-up land development activities of the West Campus

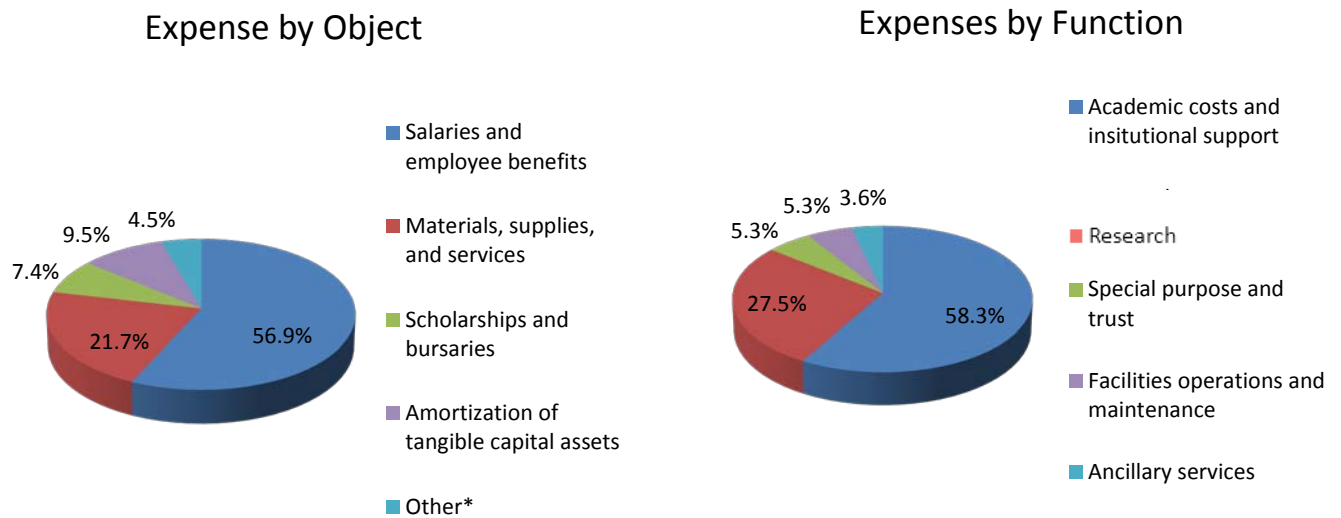
Development Corporation that will become positive upon entering into sub-leases with tenants throughout future development phases.

EXPENSE

For the year ended March 31, 2017, the University recorded \$1,313.8 million in expenses representing an increase of \$41.0 million (3.2%) over the prior year and \$39.6 million (3.1%) higher than budget. Salaries and benefits are the largest expenditure component at the University, representing 56.9% of the University’s expenses. Compensation expenses continue to be a challenge when making budgeting decisions, especially during times where increases in operating grants do not adequately fund increase in salaries that are often governed by union and faculty agreements.

Academic costs and institutional support represents the single largest function at the University, with this function representing 58.3% of the University’s expenses. This includes instruction, non-research academic and administrative support activities, effectively representing the operating activities of the University.

Figure 2 – Expense by Object and by Function for the Year Ended March 31, 2017

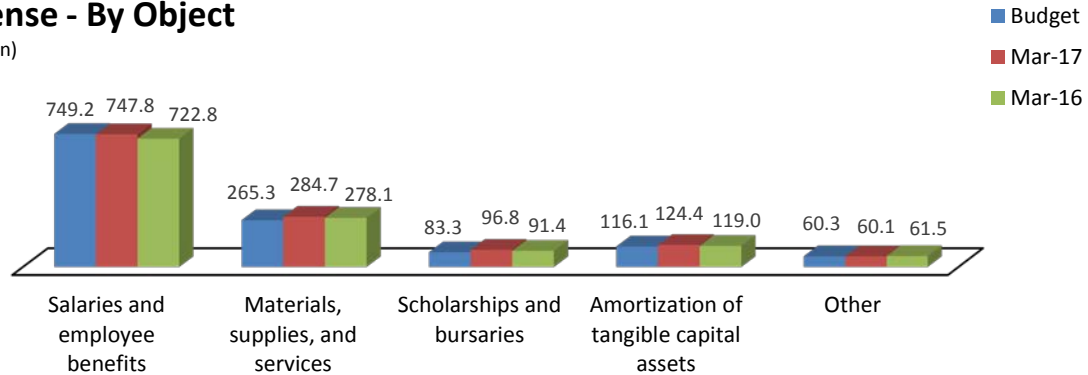


*Other expenses include: Utilities, Maintenance and repairs, and Cost of goods sold.

Figure 3 – Expense by Object and Year

Expense - By Object

(\$ million)



Salaries and employee benefits

Salaries and employee benefits of \$747.8 million have increased by \$25.0 million over the prior year but remained consistent with budgeted amounts. The increase from the prior year is primarily due to \$27.2 million in additional faculty and support staff salary and benefits costs resulting from negotiated union agreement increases, new positions, and filled vacancies, combined with \$2.7 million in additional employee benefit expenses, and offset by lower Universities Academic Pension Plan (“UAPP”) costs.

Materials, supplies and services

Materials, supplies and services of \$284.7 million represents the second largest expense component of the University with current year costs being \$6.6 million higher than the prior year and \$19.4 million higher than budget. Materials, supplies and services were higher than prior year due to \$2.0 million in additional IT licensing fees and \$3.0 million in IT strategic initiatives, combined with general increased costs across faculties and business units. Additional costs above budgeted amounts were primarily driven from University spending on Internally Restricted Net Asset funded strategic initiatives supporting research, maintenance, academic, and student learning priorities.

Scholarships and bursaries

Scholarships and bursaries of \$96.8 million were \$5.4 million higher than 2016 and \$13.5 million above budget. These higher expenses are in line with University goals for attracting and supporting students across various faculties.

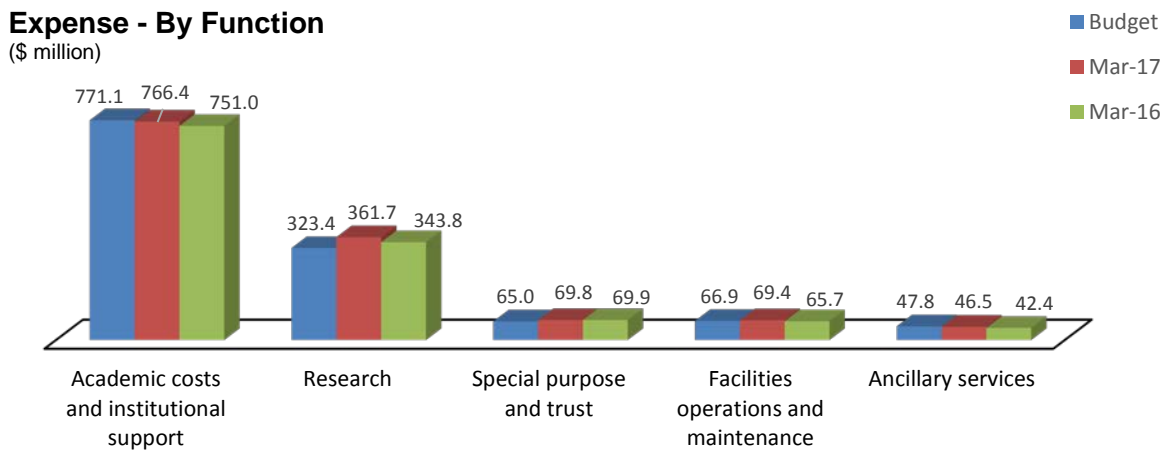
Amortization of tangible capital assets

Amortization of tangible capital assets expense of \$124.4 million increased by \$5.4 million from the prior year and increased \$8.3 million over budget. Of the total increase from budget, \$3.1 million in amortization is attributable to the Resolute Bay Incoherent Scatter Radar facility, \$2.0 million amortization as a result of the completion of the Schulich School of Engineering building, \$1.9 million amortization related to additional equipment, and \$1.3 million as a result of various new assets being put into service.

Other

Other expenses totaling \$60.1 million were relatively consistent with the prior year and budgeted amounts.

Figure 4 – Expense by Function and Year



Academic costs and institutional support

While Academic costs and institutional support expense of \$766.4 million has increased \$15.4 million over the prior year, the total academic costs and institutional support expense was \$4.7 million below budget. The increase from prior year is primarily due to \$18.9 million in increased salaries and benefits resulting from negotiated union agreement increases, new positions, and filled vacancies being partially offset by reduced UAPP pension costs. The budgetary savings of \$4.7 million was as a result of \$22.0 million from vacant employee positions and unbudgeted recoveries primarily in research, partially offset by \$17.3 million in increased in scholarship and materials, supplies, and services expenses.

Research and Special purpose and trust

Research costs of \$361.7 million were \$17.9 million higher than prior year and \$38.3 million higher than budget. This increase is due to the University’s strategic focus on directing resources and activities towards research initiatives in support of *Eyes High* goals for increasing research across many faculties of the University. Special purpose and trust costs of \$69.8 million were comparable to prior year and \$4.8 million higher than budgeted amounts primarily due to scholarship expenses.

Facilities operations and maintenance

Facilities operations and maintenance costs of \$69.4 million were \$3.7 million higher than prior year and \$2.5 million higher than budget. The increase is a result of operating and maintaining a growing and aging campus infrastructure, offset by \$2.4 million in budgeted utility savings from lower than expected utility costs.

Ancillary services

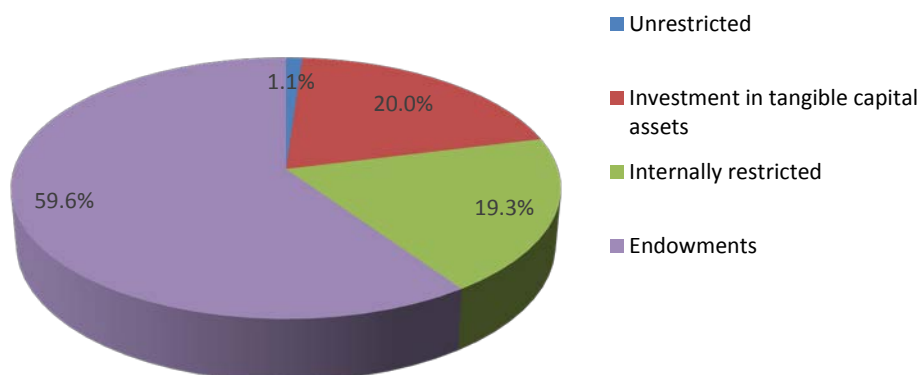
Ancillary expenditures of \$46.5 million were \$4.1 million higher than prior year due to increased costs associated with housing Fort McMurray evacuees offset by cost savings in salaries and benefits from reduced positions and improved efficiencies.

6.3 NET ASSETS AND NET FINANCIAL ASSETS

NET ASSETS

The University's net asset balance is an important indicator of financial health for the University. Prudent financial planning and decision making combined with increased endowment contributions from donors have contributed to the University's \$1,489.5 million in net assets. Endowments of \$888.1 million continue to represent the largest component of Net Assets. Endowments must be maintained in perpetuity with investment income earned used to fund specific research, scholarship, and donor supported initiatives on campus. Of the remaining \$601.4 million in net assets, \$298.5 million represents funds previously spent as a net investment in capital assets and \$287.0 million is formally restricted by the University's Board of Governors for spending on strategic initiatives in support of student learning, research, capital projects, and community service. After amounts already spent on capital assets and Board of Governors restrictions, \$15.8 million has been maintained for unforeseen events and future strategic decision making. Net assets at March 31, 2017 are comprised of the following balances and related summarized transactions:

Figure 5 – Net Assets at March 31, 2017



Net Assets (\$ thousands)	Unrestricted	Investment in Capital Assets	Internally Restricted	Endowments	Total
Balance at March 31, 2016	43,904	281,821	283,303	772,337	1,381,365
Annual operating surplus	4,345	-	-	-	4,345
Transfer to internally restricted net of expenditures	(40,030)	-	40,030	-	-
Endowment contributions and capitalized income	-	-	-	69,540	69,540
Net capital asset acquisition, amortization and debt financing	19,643	16,687	(36,330)	-	-
Change in accumulated remeasurement gains	(12,021)	-	-	46,222	34,201
Balance at March 31, 2017	15,841	298,508	287,003	888,099	1,489,451

NET FINANCIAL ASSETS

The University's liquidity needs are met primarily through operating cash flows, working capital balances and capital expansion funding received through grants or long-term debt. The Net Financial Asset indicator is intended to identify the availability of net financial resources of an organization to fund future operations after considering liabilities owed to third parties. The University presents the Net Financial Asset indicator in a manner as directed by the Controller of the Province of Alberta. The presentation includes \$888.1 million of investments that are restricted for endowments. Portfolio investments – restricted for endowments must be maintained in perpetuity and are therefore not available to pay for University liabilities, nor can the University use the endowment portfolio investments to pay for future operating or capital purchases. As a result, net financial assets excluding portfolio investments restricted for endowments is also presented on the Consolidated Statement of Financial Position.

At March 31, 2017 Net Financial Assets excluding portfolio investments restricted for endowments was \$50.1 million, representing a \$1.2 million decrease from the prior year. This decrease is due to cash flow timing related to capital expansion being partially offset by the annual operating surplus. The \$50.1 million balance demonstrates the University's commitments to manage its financial position.

6.4 CAPITAL EXPANSION AND RENEWAL

On September 9, 2016, the federal government announced that the University would receive funding for key campus infrastructure projects totaling \$160.0 million from the Post-secondary Institution Strategic Investment Fund ("SIF"). \$78.0 million of the total funding is from the federal government, with the remaining \$82.0 million coming from a mix of provincial funding, philanthropy and the University's own infrastructure dollars. As at March 31, 2017, the University had received \$29.1 million in SIF funding. Given the provincial government facilitates the payment of the SIF program on behalf of the federal government, the SIF funding is included within the Government of Alberta transactions and balances note within the financial statements.

Continuation of capital expansion and renewal projects remains a critical priority for the University, contributing not only to the student learning experience and the quality of research activity, but also positively to the Calgary economy. In 2017, the University acquired \$140.3 million (2016 - \$204.1 million) of capital assets. This capital activity represents the continuation of the University's multi-year capital building program through construction of new buildings as well as redevelopment, renovation, and numerous instructional facility upgrade projects.

The following represents progress on the top three major construction projects on campus:

Table 12 – Major Capital Project Costs

Major Capital Project Costs (\$ thousands)	2017	Project to Date	Total Budget
Schulich School of Engineering Expansion	42,678	162,392	173,875
High Density Library Expansion	2,875	2,875	30,000
Western Canadian Microbiome Centre	7,825	9,205	26,453

Schulich School of Engineering Expansion and Renovation (SSE) – During 2013-14, construction began on this \$173.9 million dollar initiative to construct an 18,300 square meter expansion to the Canadian Natural Resources Limited Engineering Complex, along with major renovations to 11,100 square meters of the existing building footprint. The building expansion includes high intensity research labs and support spaces, undergraduate engineering teaching labs, group workrooms, low intensity research facilities, and classroom and theatre spaces.

High Density Library Expansion - The High Density Library (HDL) is a dedicated environmentally controlled storage facility that holds books, journals, archival files, photographs, audio-visual media and museum art and artifacts. The University is expanding the HDL to include additional storage, cold storage, collection evaluation, and processing facilities. This expansion and move will consolidate the University's collection of less-used library material into one location, designed with the goal of long-term material preservation.

The Western Canadian Microbiome Centre (WCMC) – The WCMC is an ambitious research initiative focusing on global leading microbiome research. This program includes the construction of a Germ Free Facility, renovations to accommodate the installation of a Flow Cytometry unit, decanting and related renovations. This includes the Germ Free Lab which is a specialized environment focused on the transplantation of microbes to study the effects of microbiome on chronic diseases. The 950 square meter facility will be located in the basement of the Health Sciences Centre. The Flow Cytometry involves the installation of mass cytometry diagnostic equipment located on the 2nd floor of the Health Sciences Centre allowing investigators to study detailed aspects of individual plant, animal and microbial cells.

6.5 AREAS OF SIGNIFICANT FINANCIAL RISK

DEFERRED MAINTENANCE

The University directs significant resources to ensure that University buildings are updated with relevant technology, operate efficiently, and meet university and external regulatory standards. The University has an outstanding deferred maintenance balance of nearly \$518.6 million (2016 - \$487.3 million). Infrastructure Maintenance Program funding from the province increased to \$14.4 million (2016 - \$11.0 million) as compared to the prior year.

UNFUNDED PENSION LIABILITY

The University participates with other Alberta post-secondary institutions in the UAPP to provide pensions for participating faculty and staff. The extrapolated actuarial deficiency for the pension plan at March 31, 2017 was \$763.9 million (2016 - \$868.7 million) of which the University's portion is \$85.0 million (2016 - \$108.9 million). This unfunded deficiency in the UAPP is currently being funded by the Government of Alberta, employee and employer contributions. The deficiency will be eliminated by 2043.

BUDGETARY PRESSURE

Although the University has a balanced budget for 2017-18, it is presenting deficit forecasts for 2018-19 and 2019-20. The University is facing a number of risk factors, most notably funding uncertainty related to provincial operating funding. Without increases in provincial funding to offset inflationary costs, and combined with legislatively mandated ceilings on tuition

increases, the University will continue to explore and implement process efficiencies and revenue generating opportunities. The University will continue to work in partnership with the government, to help bridge the gap between increasing costs and stagnant revenues. While prudent financial management has resulted in balanced results, budgetary pressures remain a significant strategic risk for the University of Calgary.

7. Internationalization

Our city demands graduates, both domestic and international, who have a global orientation, who are competitive in a global marketplace, and who can adapt to diverse cultural, economic, and political environments. The recruitment of international students is increasingly recognized as an important element in a broader strategy for attracting highly qualified people to our country. Moreover, the world's top universities are all international in orientation with well-developed global webs of interaction that help them to create, disseminate, and apply knowledge.

7.1 INTERNATIONAL OUTCOMES

Internationalization is one of the seven (7) academic priorities identified in our 2012 Academic Plan that serves as a roadmap to our *Eyes High* vision. We are pleased to report significant progress during 2016-17 toward the achievement of the four goals we identified in our International Strategy (i.e., increase the diversity of our campus communities; improve the global and cross-cultural competencies within our campus communities; enhance opportunities for international collaborations and partnerships in research and education; and leverage our areas of expertise to engage in international development). Table 13 provides a brief description of the strategic initiatives undertaken to advance our international priority, their status (i.e., delayed, in progress, complete, or ongoing), and the percent complete as of March 31, 2017.

Table 13 – Internationalization

Strategic Initiative	Status	Percent Complete
General		
Continue implementation of the strategic plans for all six countries/regions of emphasis	Ongoing	100
Continue to organize Country Days (e.g., Mexico days, China days, Germany days) and develop major international related activities/symposia on campus	Complete	100
Create a new internationalization recognition awards program for students, staff, faculty, and community members based on the values, principles and strategies of the international strategy	Complete	100
Diversity		
Continue to implement the international recruitment strategy	Ongoing	100
Implement international undergraduate articulation programs to meet institutionally established targets with international partners in Asia, Latin America and Europe	In Progress	70
Ensure finalization of dual master's degree program proposals with international partner universities (e.g., University of Edinburgh, Arizona State University)	In Progress	50
Ensure IFP and EAL initiatives meet student, programming, international, and community needs	Complete	100
Cross-cultural Competencies		
Pilot the cross-cultural competencies program that was recently developed for our students, staff and faculty as well as program offerings to businesses and the community	In Progress	50
Partnerships		
Formalize the University procedures and processes at the faculty and institutional level for PhD Cotutelle programs	Complete	100

Strategic Initiative	Status	Percent Complete
Ensure a full complement of customized short-term programs are being offered on a regular basis in Calgary, at global research sites (e.g., Beijing, Mexico City) and at key international hubs	Complete	100
International Development		
Expand international development projects to include relevant faculties (e.g., Cumming School of Medicine, Werklund School of Education, Social Work, Arts) engaged in international development projects and issues	Complete	100

7.2 OFF-SHORE INTERNATIONAL EDUCATIONAL ACTIVITY

At the University of Calgary, we offer a number of our credit programs in off-shore locations as part of our international strategy. This activity promotes capacity building, fosters mobility and the international experience of students and staff, generates revenue, extends educational access, and extends our research collaborations. Our off-shore program activity is also aligned with the objectives of Alberta's *International Strategy 2013*, which are to diversify markets to expand the economy, build Alberta's reputation as a global citizen, prepare Albertans for success in the global community, and prioritize and integrate government action to take advantage of international opportunities. Off-shore activity also encourages international collaborations as a means of promoting and expanding Alberta economic and social development and international co-operation.

Nursing

Our flexible, innovative, nursing degree programs in Qatar prepare students for rewarding nursing careers (Table 14). Throughout their programs, students are provided with a sound theoretical base and supervised clinical experience in a variety of nursing practice settings. Nursing students in Qatar are educated to the same Canadian standards and receive the same credentials as students at the Calgary campus. Students and graduates in Qatar practice in the community, in primary health centres, in clinics and schools in addition to acute care hospitals.

Table 14 – Off-Shore International Education Activity (Nursing)

Core Metrics	Rationale for Metric
Name of Alberta Institution	University of Calgary
Name of Other Alberta Partners	None
Country Location	Qatar
Field of Study	Nursing
Courses Offered	http://www.qatar.ucalgary.ca/prospective/programs
Level of Study	Nursing Foundation Program (non-credit) Diploma in Nursing Program (non-credit) Bachelor of Nursing (BN) Regular Track Program (credit) Bachelor of Nursing (BN) Post-Diploma Program (credit) Master of Nursing (credit)
Qualification Offered	Bachelor of Nursing Master of Nursing
Type of Operation	Stand-alone
Principle Mode of Delivery	In-class instruction
Name of International Program Host	State of Qatar
Enrolment (2016 Fall Headcount)	460 students including open studies; 391 students excluding open studies

Law

The University of Calgary and the University of Houston each enjoy international reputations as leading law schools in the areas of natural resources, energy and environmental law. Calgary and Houston are the two largest energy hubs in North America, and their joint International Energy Lawyers Program (IELP) allows students to analyze complex emerging issues in the fields of natural resources, energy and environmental law, while learning from some of the best academic and legal minds in energy, corporate and international law (Table 15). Established in 2012, the IELP is a joint Juris Doctor (JD) program that allows students to earn both Canadian

and American law degrees in four years. Upon program completion, students are able to apply for admission to the bars in both Canada and the US, and with skills and knowledge in energy law, will be highly employable across North America. In addition to the regular degree studies, the IELP is structured to facilitate internships in the energy industry.

Table 15 – Off-Shore International Education Activity (Law)

Core Metrics	Rationale for Metric
Name of Alberta Institution	University of Calgary
Name of Other Alberta Partners	None
Country Location	United States (Houston, Texas)
Field of Study	Law
Courses Offered	http://law.ucalgary.ca/ielp/details
Level of Study	International Energy Lawyers Program (credit)
Qualification Offered	Juris Doctor (JD)
Type of Operation	Joint delivery
Principle Mode of Delivery	In-class instruction
Name of International Program Host	University of Houston Law Center
Enrolment (Fall 2016 Headcount)	4 Incoming, 2 Outgoing

Business Administration

Our Global Energy Executive Master of Business Administration (GEMBA) program offered by the Haskayne School of Business is taught by world-class professors and leading industry experts from around the globe (Table 16). The relationship between the Haskayne School of Business and the energy sector has a long history, and its integration with the wider Calgary community makes the school an ideal place to study. Students benefit from the collective experience of a diverse, international cohort as well as learning from world-class faculty and thought leaders in industry and government. The GEMBA is delivered over 20 months with continuous online learning, combining five intensive modules in key energy centres around the world (e.g., Beijing, China; Doha, Qatar; London, United Kingdom; Houston, United States; Calgary, Canada). This unique delivery model enables students to work throughout the program.

Table 16 – Off-Shore International Education Activity (Global Energy Executive MBA)

Core Metrics	Rationale for Metric
Name of Alberta Institution	University of Calgary
Name of Other Alberta Partners	None
Country Location	Canada, China, Qatar, United Kingdom, United States
Field of Study	Business Administration
Courses Offered	http://haskayne.ucalgary.ca/programs/gemba/program-overview
Level of Study	Global Energy Executive MBA Program (credit)
Qualification Offered	Master of Business Administration
Type of Operation	Stand-alone
Principle Mode of Delivery	In-class and online instruction
Name of International Program Host	University of Calgary
Enrolment (Fall 2016 Headcount)	21

8. Information Technology

As information technologies reach deeper and broader into the life of the academy, it is imperative that the University of Calgary maintains leading edge technologies. This means that information technologies must be available, reliable, ubiquitous, scalable, and innovative so that our community is able to work and learn anywhere, any time and via any method. Additionally, the University of Calgary must strike a balance between the need for IT innovation with the cost to deliver the best value to our community. Our IT strategy is driven by the priorities outlined within the Goals, Priorities and Expected Outcomes section of this report. These priorities, along with the strategies outlined in the Strategic Framework for Learning Technologies, provide the context for our investment in information technologies.

INFORMATION TECHNOLOGY STRATEGY

The University of Calgary continues to invest in technologies that not only meet administrative requirements, but more importantly enhance the educational and research experience of students, faculty and staff. Several multi-year initiatives began or continued in 2016-17 focused on sustaining and enhancing our IT infrastructure environment. As we move towards our *Eyes High* goal of becoming one of Canada’s top five research institutions, investments such as these will position the University of Calgary to be a leader in data security and data integration, research analytics, and cloud solutions and server-hosting (Table 17).

Table 17 – Information Technology

Strategic Initiative	Status	Percent Complete
Investments to secure the university’s IT environment and ensure the security and privacy of sensitive information	In Progress	70
Enhancing data integrity, data availability and data mining through greater integration	In Progress	70
Employing more efficient technology and system solutions with greater functionality to address the growing requirements of research analytics, academic outreach and student services	In Progress	70
Evergreen funds to support and maintain current systems which are impacted by foreign exchange and continuous maintenance increases	In Progress	70
Investments into co-lo, cloud solutions and server-hosting options to meet growing demand for additional computing and storage capacity	In Progress	70

9. Capital Plan

The University of Calgary has grown from a bare-land education reserve in the late 1950s to a fully developed, urban, inner-city campus in 2015. With the first of our buildings dating back to the 1960s, approximately half of the university’s space is over 40 years old. While the campus has undergone a modest expansion over the past few years, our total space inventory still falls short of that required to meet program demand, let alone the needs of an expanding and evolving academy. As we continue to grow and evolve, so does our need to maintain, renew, repurpose, and expand our facilities to meet the aspirations outlined within our *Eyes High* vision. In this section, we identify capital projects in planning and in progress essential to support the academic and research outcomes identified in our 2016 Comprehensive Institutional Plan.

9.1 CAPITAL PROJECTS IN PLANNING

Through our capital planning process, we identified priority projects necessary to achieve our *Eyes High* vision (Table 18). We highlight these projects because our plan to meet the growing needs of Albertan learners involves the Government of Alberta as a strategic partner in the achievement of goals for Alberta’s post-secondary education system. Guided by our academic and research priorities, we require \$845.0 million to support our highest-priority capital projects. For a complete list of priority capital projects, please refer to the ten-year capital forecast contained in our 2016 Comprehensive Institutional Plan.

Table 18 – Capital Projects in Planning

(\$ millions) Project	Enrolment (FLE) Capacity	Budget
MacKimmie Complex and Professional Faculties Building Redevelopment	500	260.0
Science A Redevelopment Phase 2	625	185.0
Life and Environmental Sciences Research Centre	360	145.0
Haskayne School of Business Advanced Learning Centre	650	90.0
Foothills Campus Code Upgrades and Renewal	N/A	165.0
Total	2,135	845.0

The MacKimmie Complex and Science A redevelopment projects will provide much needed support to deal with the existing deferred maintenance, space shortfall, and code issues resulting in their partial closure. These buildings are located in the heart of the main campus, and the programing contained within them ensures that the crucial central services these facilities provide to the entire campus remain easily accessible. The Life and Environmental Science Research Centre will provide space for 360 FLEs and also provide critical upgrades to research lab services. By centralizing these services in one building we can promote lower operating costs for a number of programs across the institution and promote strong interdisciplinary research in a number of our priority research areas. The Haskayne School of Business Advanced Learning Centre will not only provide space for 650 new FLEs, it will provide classroom space for first and second year programs which are currently held across the campus. This centralization of classroom and learning space for business will enable better utilization and proximal use of classrooms across the campus, which in turn will provide a

stronger student experience. The Foothills Campus Code Upgrades and Renewal project is a pure maintenance project. It is critical to ensure the viability of our medical program and allow us to reorganize the space to maximize its utilization and provide modern and functional lab space required for today's and tomorrow's researchers.

9.2 CAPITAL PROJECTS IN PROGRESS

The University of Calgary leverage the funds that it receives through the generous support of government, institutional partnerships, and community philanthropists, with its own internal resources to construct new buildings, and renew, expand, and maintain existing infrastructure. Infrastructure refers to the construction of capital buildings and site improvements. It includes costs directly attributable to architectural, engineering, and legal fees, as well as construction materials and labour. Infrastructure typically has an estimate useful life of 20 to 40 years.

Shown in Table 19 is the status of capital projects in progress (i.e., projects in excess of \$2.5 million or 50.0 percent of the institution's \$14.4 million Infrastructure Maintenance Program grant, whichever is larger) that began, continued, or were completed in 2016-17. The status of each project is shown as either in progress, complete, or delayed. This also includes projects supported by the Infrastructure Maintenance Program (IMP) grant provided by the Government of Alberta. This grant assists with the cost of maintaining the condition of facilities and covering the cost of repairs, upgrades, maintenance, and replacement of building systems and major building components.

Table 19 – Major Capital Projects in Progress

Description	Project Phase	Expected Completion	Percent Complete
Expansion / Renewal			
Schulich School of Engineering Renovation & Expansion			
Utility Reduction Program (URP)	In Progress	12/31/17	94
Western Canadian Microbiome Centre	In Progress	04/30/18	10
Mackimmie Complex and Professional Building	In Progress	07/31/17	60
Education Tower Restack Plan	In Progress	06/30/22	5
Mobility and Joint Health (CFI Round 7)	Complete	09/30/17	100
Research Facility Code Compliance	Complete	09/30/17	100
Transition Region Explore (TREx) – A Ground-Based Sensor	In Progress	03/30/18	70
ACHRI HSC lab refurbishment (12 labs)	In Progress	03/31/18	5
Minor Faculty and Unit Renewal Projects	Complete	09/30/17	100
Infrastructure Maintenance Program	In Progress	Ongoing	Ongoing

10. Performance Measures



PERFORMANCE MEASURES LIST

★ *University of Calgary performance within the top five based on 2015-16 data.*

* *Comparative data is not available between peer institutions for these performance measures.*

TEACHING AND LEARNING

- Teaching (under development)
- ★ Retention rate (undergraduate)
- ★ Graduation rate (undergraduate)
- ★ Graduation rate (master's)
- ★ Graduation rate (PhD)
- Time to completion (undergraduate)*
- ★ Time to completion (master's)
- ★ Time to completion (PhD)
- Ratio of applicants to student intake (undergraduate)*
- Ratio of applicants to student intake (graduate)*
- Average entering grade
- ★ Graduate proportion of total enrolment
- International proportion of total enrolment (undergraduate)
- ★ International proportion of total enrolment (graduate)
- ★ Ratio of students to faculty (total)
- ★ Ratio of students to faculty (graduate)
- ★ Undergraduate student engagement (NSSE) (first year)
- ★ Undergraduate student engagement (NSSE) (senior year)
- ★ Graduate student engagement (CGPSS)
- Graduate satisfaction*
- Degrees awarded (undergraduate)
- Degrees awarded (graduate)
- Employment rate (total)*
- Employment rate (employed in related jobs)*

RESEARCH AND SCHOLARSHIP

- Postdoctoral scholars (total)
- ★ Postdoctoral scholars (per tenure and tenure-track faculty)
- Sponsored research funding (total)
- ★ Sponsored research funding (per tenure and tenure-track faculty)
- Tri-council funding (total)
- Tri-council funding (per tenure and tenure-track faculty)
- Publications (total)
- ★ Publications (per tenure and tenure-track faculty)
- ★ Citations (total)
- ★ Citations (per tenure and tenure-track faculty)
- ★ New invention disclosures
- ★ New licenses

COMMUNITY AND ENVIRONMENT

- ★ Fundraising
- ★ Endowment
- ★ Sustainability Tracking, Assessment and Rating System (STARS)
- ★ Facilities condition index
- ★ Unrestricted net assets
- Employee engagement*

Figure 6 – Teaching
Figure 7 – Undergraduate Retention Rate

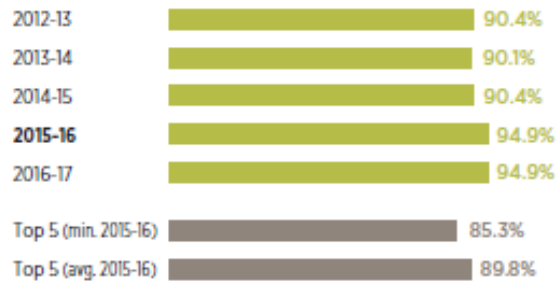
TEACHING

We are developing programs to promote the professional development of professors, instructors, graduate students, and teaching assistants to create and nurture a culture of expert instruction and learning. Measuring the results of these initiatives will ensure that our students will benefit from the support, education, mentoring, and continuous improvement that we provide inside and outside the classroom.

UNDERGRADUATE RETENTION RATE



This measure helps us understand the key factors that compel students to complete their degree programs or cause them to consider an alternative path after their first year of study. Our retention rate of students transitioning from year one to year two was high and remains high, and surpasses the average of our top five peer institutions.



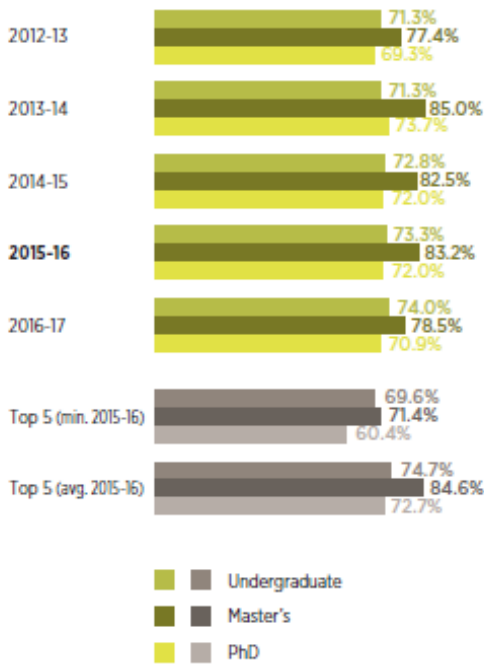
Source (University of Calgary): Consortium for Student Retention Data Exchange (CSRDE).

Source (Top 5): CSRDE. One institution reported previous years' data.

Figure 8 – Graduation Rate
 Figure 9 – Time to Completion

GRADUATION RATE

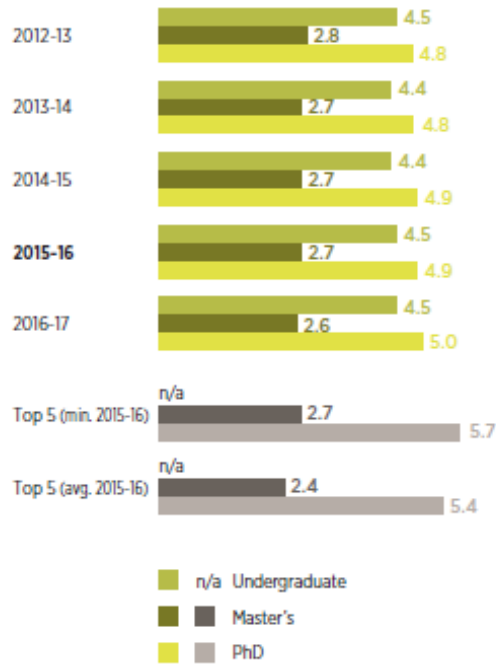
This measure tracks the percentage of students who ultimately graduate from a group, or cohort, who began their studies at the same time. Compared to our top five peers, we are currently within range at the undergraduate and master's levels, and slightly above our peers at the PhD level.



Source (University of Calgary): Retention and time-to-completion reports (years). Tracking period: undergraduate 6-Year; master's 5-Year; PhD 9-Year. Master's completion rate includes students promoted to PhD.
 Source (Top 5): Retention and time-to-completion reports. One institution reported previous years' data.

TIME TO COMPLETION

This measure tracks the average number of years it takes students to complete their degree programs at the University of Calgary. Understanding this dynamic helps us refine our support services for students as they progress. Undergraduate, master's and PhD times-to-completion have remained relatively stable. The master's time-to-completion is within the top five while the PhD time-to-completion is better than the average time for PhDs in the top five. Time-to-completion data is not available at the undergraduate level.

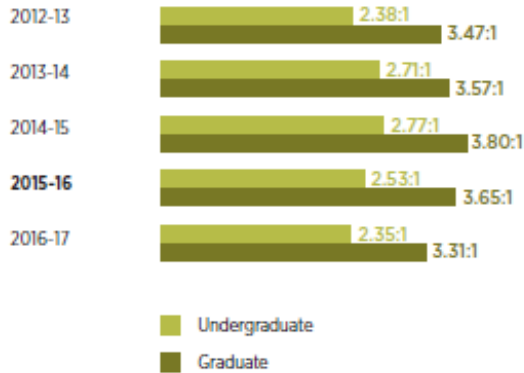


Source (University of Calgary): Retention and time-to-completion reports (years). Tracking period: undergraduate 6-Year; master's 5-Year; PhD 9-Year.
 Source (Top 5): Retention and time-to-completion reports. Note: University of Calgary undergraduate data only; data is not shared among Top 5 peers.

Figure 10 – Ratio of Applicants to Student Intake
 Figure 11 – Average Entering Grade from High School

RATIO OF APPLICANTS TO STUDENT INTAKE

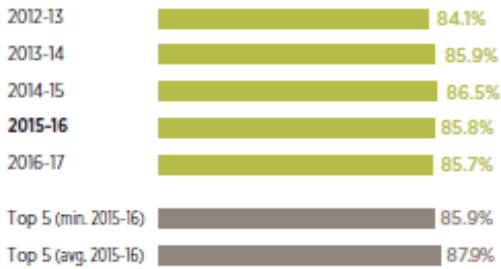
This metric is calculated as the number of applicants we attract relative to the number of available student spaces. It is one indicator of program demand.



Source: Government of Alberta Application Submission Initiative (ASI).
 Note: The number of graduate applicants is understated by ASI.
 Note: University of Calgary data only; data is not shared among Top 5 peers.

AVERAGE ENTERING GRADE FROM HIGH SCHOOL

We promote high levels of student achievement by emphasizing the importance of academic admission standards. The average entering grade is one of a number of leading indicators of graduation rates. We are currently in close ranks with our top five peers.



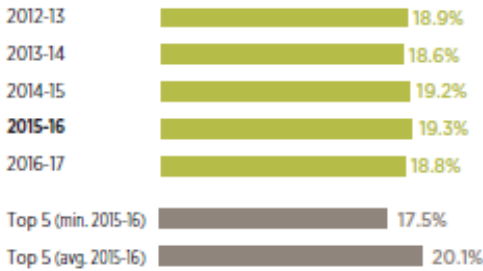
Source (University of Calgary): Consortium for Student Retention Data Exchange (CSRDE).
 Source (Top 5): Maclean's university rankings; data, one institution reported previous year's data.

Figure 12 – Student Mix (Graduate Proportion of Total Enrolment)
 Figure 13 – Student Mix (International Enrolment)

STUDENT MIX (GRADUATE PROPORTION OF TOTAL ENROLMENT)



We monitor the graduate proportion of our total student population to ensure that we grow to the level of leading research universities. The proportion of graduate students at leading international research universities is approximately 25 per cent, and our intent is to move towards that target. The University of Calgary is currently within the range of the top five Canadian institutions.

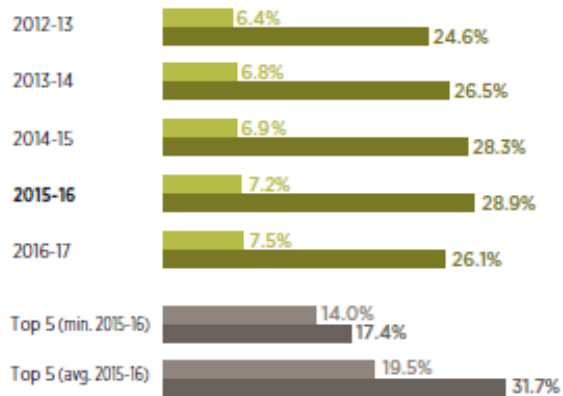


Source: UTS Enrolment Report (full-time and part-time headcount).

STUDENT MIX (INTERNATIONAL ENROLMENT)



We monitor the number of international students that we attract to ensure that we are preparing our students for work in the global community. We have set targets for international students to be 10 per cent of our undergraduate population and 25 per cent of our graduate population. We have exceeded our goal at the graduate level and continue to diversify our undergraduate population.



■ Undergraduate
 ■ Graduate

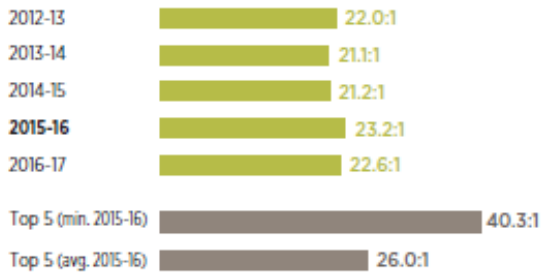
Source: UTS Enrolment Report (full-time headcount).

Figure 14 – Ratio of Students to Faculty (Total)
 Figure 15 – Ratio of Students to Faculty (Graduate)

RATIO OF STUDENTS TO FACULTY (TOTAL)



This measure tracks the ratio of full-time equivalent (FTE) students to academic staff. A lower ratio ensures greater student access to faculty. University of Calgary students have better access to their instructors than their counterparts at many other institutions across Canada. This ratio increased in 2015-16 because of a U15 methodology change. This measure has improved this year as a result of a recent accelerated faculty hiring program.

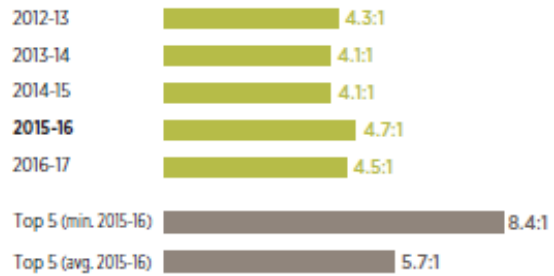


Source: U15 Fact Book, Full-time equivalent (FTE) students and full-time tenure and tenure-track academic staff.

RATIO OF STUDENTS TO FACULTY (GRADUATE)



This ratio is an indicator of the vibrancy of our graduate programs, measuring the total number of full-time equivalent (FTE) graduate students to academic staff. A lower ratio ensures greater student access to faculty. Graduate students at the University of Calgary enjoy greater access to their academic mentors than their peers at other Canadian universities. This ratio increased in 2015-16 because of a U15 methodology change. This measure has improved this year as a result of a recent accelerated faculty hiring program.



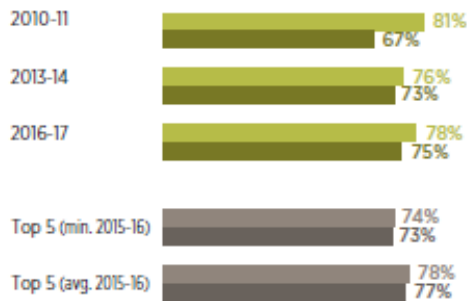
Source: U15 Fact Book, Full-time equivalent (FTE) students and full-time tenure and tenure-track academic staff.

Figure 16 – Undergraduate Student Engagement
 Figure 17 – Graduate Student Engagement

UNDERGRADUATE STUDENT ENGAGEMENT



We monitor the quality of our learning environment, and the overall level of satisfaction reported by first-year and senior-level undergraduate students, through their responses to the National Survey of Student Engagement (NSSE) question, 'How would you evaluate your entire educational experience at this institution?' Percentages shown are ratings of 'good' to 'excellent'. We rank amongst our top five peers for both first-year and senior-year students. Student engagement will be a continued area of focus.



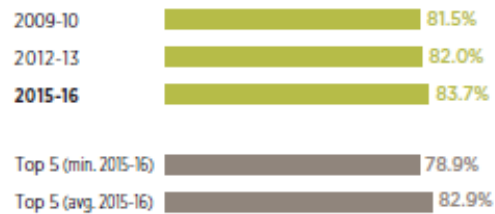
■ First year
 ■ Senior year

Source (University of Calgary): NSSE.
 Source (Top 5): Maclean's.
 NSSE is administered every three years.

GRADUATE STUDENT ENGAGEMENT



We monitor the quality of the learning environment and the overall level of satisfaction reported by our graduate students in regular programs through their responses to a Canadian Graduate and Professional Student Survey (CGPSS) question that assesses the percentage of students (master's and PhD) rating the quality of their graduate program as 'good' to 'excellent'. Although we currently rank among our top five peers, we will continue to focus on graduate student engagement.



Source: UTS CGPSS.
 CGPSS is administered every three years.

Figure 18 – Graduate Satisfaction
 Figure 19 – Degrees Awarded

GRADUATE SATISFACTION

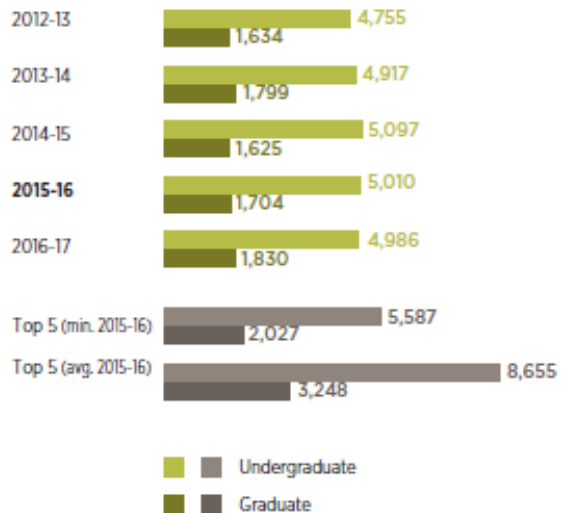
We monitor the quality of our learning environment through student responses to the question, 'rate the quality of your education experience' on a Government of Alberta survey completed two years after graduation. Percentages shown are ratings of 'satisfied' and 'very satisfied'. This has been a focus of concentration in the past few years and the effort has been worthwhile. Graduate satisfaction will continue to be an area of focus.



Source (University of Calgary): Graduate Outcomes Survey.
 Note: University of Calgary data only; data is not shared among Top 5 peers.
 The Graduate Outcomes Survey is administered every two years.

DEGREES AWARDED

This measure indicates how many students graduate each year and go on to be thoughtful, communicative citizens and leaders of their respective communities with abilities to think critically and creatively to solve issues of the day. We are using a sustainable growth model to determine overall enrolment, so our graduate numbers will be relatively stable, unless further funding is provided to increase enrolment. Recently, we received such funding, but will not see the benefit of that funding in terms of graduates for at least three years. The top five institutions are also all larger than the University of Calgary, and so, in absolute numbers, would be expected to produce more graduates.

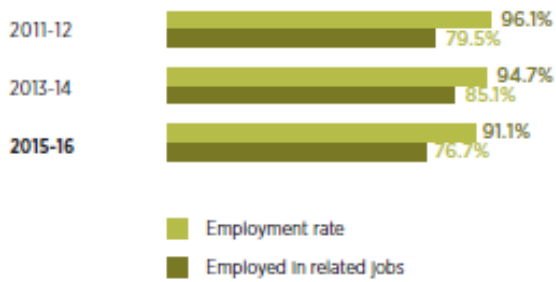


Source: UTS Degree Awarded Report (excludes certificates and diplomas).

Figure 20 – Employment Rate

EMPLOYMENT RATE (GOVERNMENT OF ALBERTA GRADUATE OUTCOMES SURVEY)

We monitor how well we respond to the needs of individual learners and to the social, economic and cultural needs of the province through the percentage of graduate survey respondents who are employed, and employed in a related field, within a specified period following graduation. Data on this metric is not shared among our top five peers.

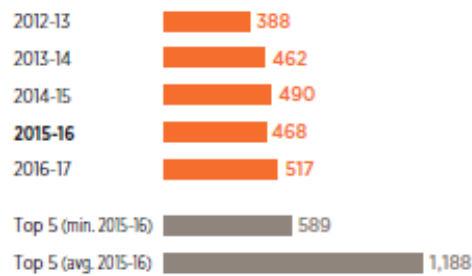


Source (University of Calgary): Graduate Outcomes Survey.
Note: University of Calgary data only; data is not shared among Top 5 peers.
The Graduate Outcomes Survey is administered every two years.

Figure 21 – Postdoctoral Scholars
 Figure 22 – Postdoctoral Scholars (Per Tenure & Tenure-Track Faculty Member)

POSTDOCTORAL SCHOLARS

Postdoctoral scholars contribute to our overall research quality and productivity, and therefore the number of postdoctoral scholars is an indication of the research environment on our campus. We continue to grow in this important area. However, the top five institutions are all larger than the University of Calgary, and so, in absolute numbers, would be expected to attract and engage more postdoctoral scholars overall.

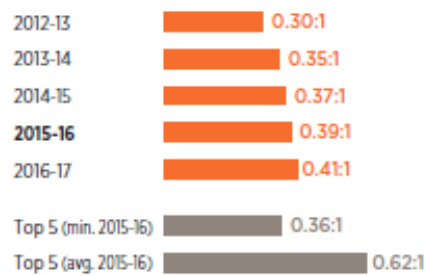


Source (University of Calgary): U15 Fact Book
 Source (Top 5): U15 Fact Book

POSTDOCTORAL SCHOLARS (PER TENURE AND TENURE-TRACK FACULTY MEMBER)



Postdoctoral scholars per tenure and tenure-track faculty member represents a relative measure of research quality and productivity. It accounts for size differences among top five institutions by dividing the total number of postdoctoral scholars by the total number of tenure and tenure-track faculty members. This ratio increased in 2015-16 despite the total number of postdoctoral scholars decreasing, because of a U15 methodology change. We no longer include clinicians in our tenure and tenure-track academic staff numbers so as to ensure a more accurate comparison with our peers. We currently rank among our top five peers.



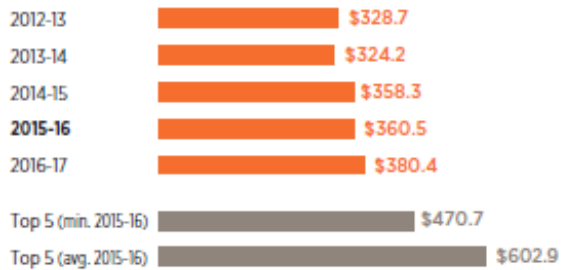
Source (University of Calgary): U15 Fact Book
 Source (Top 5): U15 Fact Book

Figure 23 – Sponsored Research Funding (Total)

Figure 24 – Sponsored Research Funding (Per Tenure & Tenure-Track Faculty Member)

**SPONSORED RESEARCH FUNDING (TOTAL)
(\$ MILLIONS)**

Our sponsored research funding measure is one indicator of our research quality and productivity. It includes funding from federal, provincial and foreign governments, corporations, foundations and non-profit organizations, as well as donations and investment funding. The top five institutions are all larger than the University of Calgary, and so, in absolute numbers, would be expected to produce more.

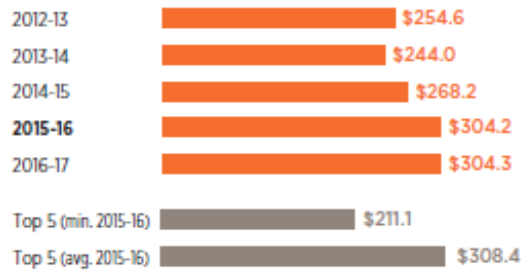


Source (University of Calgary): CAUBO.
Source (Top 5): U15 Fact Book.
CAUBO = Canadian Association of University Business Officers.

**SPONSORED RESEARCH FUNDING
(PER TENURE AND TENURE-TRACK FACULTY
MEMBER) (\$ THOUSANDS)**



This is another relative indicator of research quality and productivity. We currently rank amongst our top five peers and anticipate that this number will increase as a result of the strategies that have been put in place.



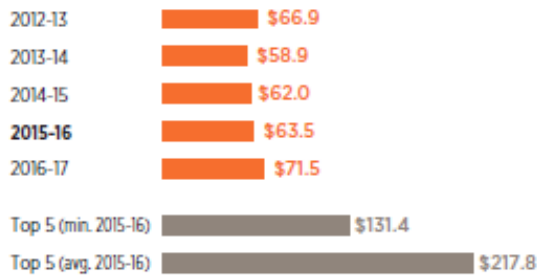
Source (University of Calgary): CAUBO.
Source (Top 5): U15 Fact Book.
CAUBO = Canadian Association of University Business Officers.

Figure 25 – Tri-Council Funding (Total)

Figure 26 – Tri-Council Funding (Per Tenure and Tenure-Track Faculty Member)

**TRI-COUNCIL FUNDING (TOTAL)
(\$ MILLIONS)**

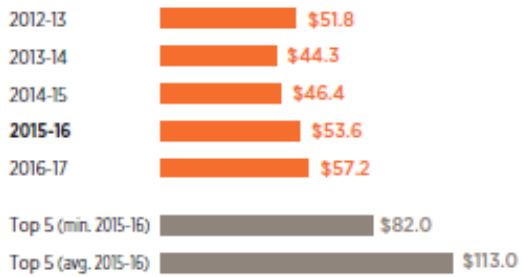
This measure is an indicator of our research income, intensity and quality. It includes grant funding from the Canadian Institutes of Health Research (CIHR), Natural Sciences and Engineering Research Council (NSERC) and the Social Sciences and Humanities Research Council (SSHRC). The top five institutions are all larger than the University of Calgary, and so, in absolute numbers, would be expected to produce more research funding.



Source (University of Calgary): CAUBO.
Source (Top 5): UTS Tri-Council Report.

**TRI-COUNCIL FUNDING (PER TENURE
AND TENURE-TRACK FACULTY MEMBER)
(\$ THOUSANDS)**

This is another indicator of research income, intensity and quality. Tri-Council research funding includes grant revenue from the Canadian Institutes of Health Research (CIHR), Natural Sciences and Engineering Research Council (NSERC) and the Social Sciences and Humanities Research Council (SSHRC).



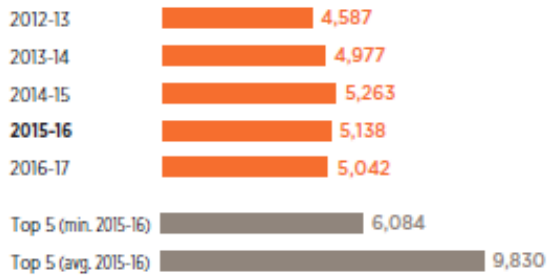
Source (University of Calgary): CAUBO, faculty counts from the UTS Fact Book.
Source (Top 5): UTS Tri-Council Report.

Figure 27 – Publications (Total)

Figure 28 – Publications (Per Tenure and Tenure-Track Faculty Member)

PUBLICATIONS (TOTAL)

One measure of a university's scholarly output is the number of academic and research publications that it produces each year. This measure monitors the number of publications produced by the University of Calgary in all subject areas compared to peer institutions. The top five institutions are all larger than the University of Calgary, and so, in absolute numbers, would be expected to produce more.

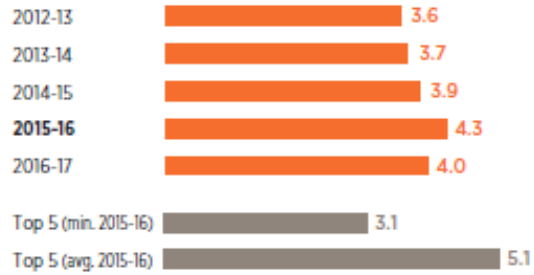


Source: Clarivate Analytics InCites™ (individual year totals).
 Note: All years have been restated with the revised data from InCites™.
 Clarivate Analytics InCites™ is a customized, web-based research evaluation tool that allows users to analyze institutional productivity and benchmark output against peers worldwide.

PUBLICATIONS (PER TENURE AND TENURE-TRACK FACULTY MEMBER)



Another measure of a university's research productivity is the number of papers produced on average by each faculty member. This measure monitors the number of publications produced by the University of Calgary by tenure and tenure-track faculty member in all subject areas compared to peer institutions. We are among our top five peers.



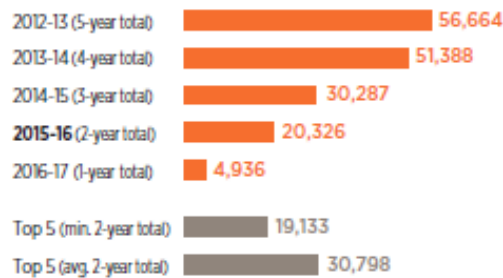
Source: Clarivate Analytics InCites™ (individual year totals).
 Significant changes in totals are due to upgrade to InCites™ and the inclusion of additional indexes.

Figure 29 – Citations (Total)

Figure 30 – Citations (Per Tenure and Tenure-Track Faculty Member)

CITATIONS (TOTAL)

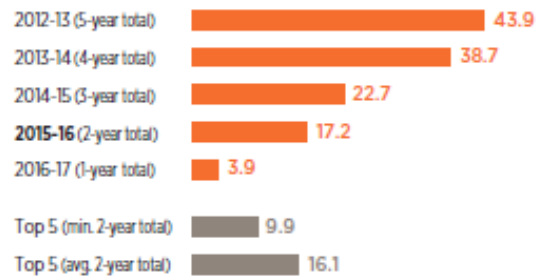
One measure of the impact of the research performed is the number of times its publications are cited. Frequently cited publications are viewed as having more relevance or impact. This measure monitors the number of citations produced by the University of Calgary in all subject areas compared to peer institutions. Citation counts follow a typical progression rate, with low numbers in the first year of publication, followed by a greater number of citations in years two through five. Because older papers have more time to accrue citations, we expect to see a smaller total citation count in 2016-17 compared to previous years. The top five institutions are all larger than the University of Calgary, and so, in absolute numbers, would be expected to produce more citations. However, this year for the first time, we fall within the top five overall with our 2-year total citation count.



Source: Clarivate Analytics InCites™ – Total citations accrued since original date of publication.

CITATIONS (PER TENURE AND TENURE-TRACK FACULTY MEMBER)

This measure monitors the number of citations per faculty member produced by the University of Calgary in all subject areas compared to peer institutions. Because older papers have more time to accrue citations, they exhibit a higher average count than more recent ones. Our 2-year citation count per faculty member now exceeds the average of the top five institutions.



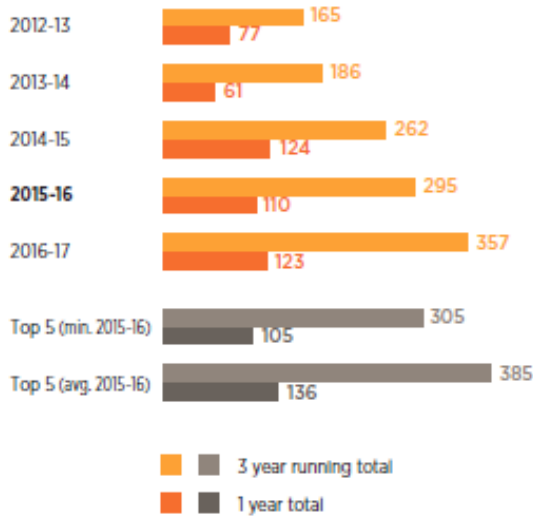
Source: Clarivate Analytics InCites™ – Total citations accrued since original date of publication; faculty counts from UIS Fact Book.

Figure 31 – New Invention Disclosures

Figure 32 – New Licenses

NEW INVENTION DISCLOSURES

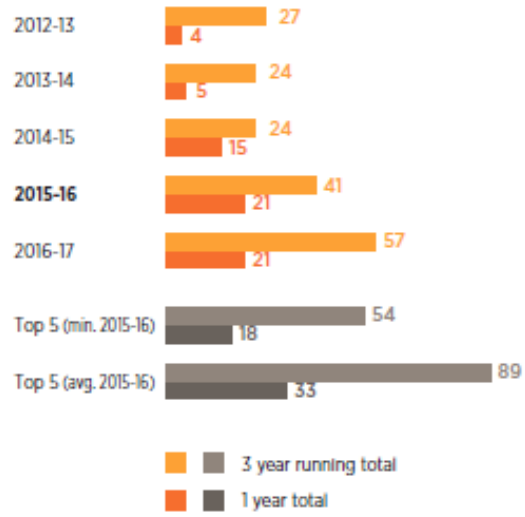
This measure monitors the number of new or novel inventions that our researchers disclose each year while patent protection is being obtained. New invention disclosures are granted for ideas that produce products, processes, machines, or compositions of matter, or any new and useful improvements of these.



Source (University of Calgary): Innovate Calgary (one-year and three-year running totals).
 Source (Top 5): AUTM Survey (one-year and three-year running totals).

NEW LICENSES

New licenses provide one measure of a university's scholarly output that will be translated into useful products that help to shape society. It refers to the number of new discoveries licensed each year.



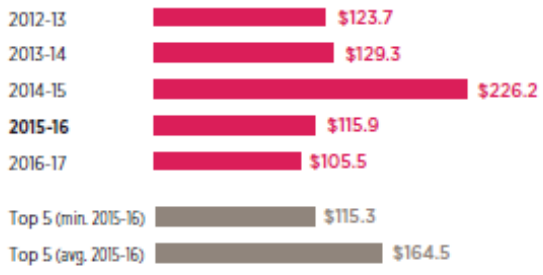
Source (University of Calgary): Innovate Calgary (one-year and three-year running totals).
 Source (Top 5): AUTM Survey (one-year and three-year running totals).

Figure 33 – Fundraising

Figure 34 – Financial Health (Endowment Balance)

FUNDRAISING (\$ MILLIONS) 

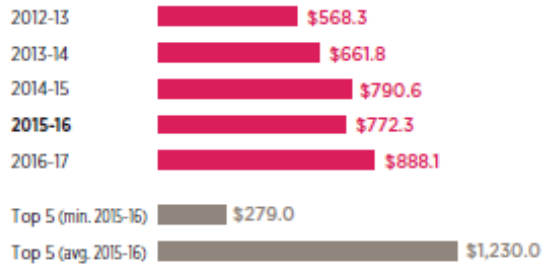
We monitor the extent to which we engage the community in our educational programs and our research, scholarship and creative activity through a measure that tracks the level of funds we raise within the community to support these activities.



Source (University of Calgary): Development Office.
 Source (Top 5): Data from institutional websites. Data available for three institutions.

FINANCIAL HEALTH (ENDOWMENT BALANCE (\$ MILLIONS)) 

Growth in our endowment balance is an important indicator of the cumulative support we have received from our community. It is an indication of our capacity to support our academic priorities in future years. While we are in the range of the top five U15 universities, this will continue to be an area of focus in the coming years.



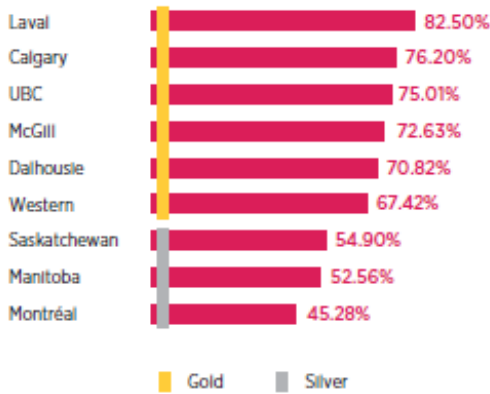
Source (University of Calgary): Financial Statements.
 Source (Top 5): U15 Fact Book.

Figure 35 – Sustainability

Figure 36 – Financial Sustainability (Facilities Condition Index (FCI))

SUSTAINABILITY 

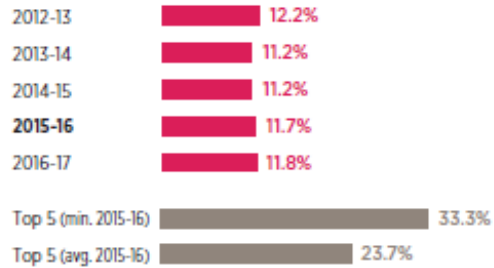
We measure performance in sustainability initiatives using the Sustainability Tracking, Assessment and Rating System (STARS) developed by the Association for the Advancement of Sustainability in Higher Education (AASHE). This measure monitors our performance in the areas of environmental and social sustainability in education and research, operations, planning and administration. The benchmark below includes UCalgary data from 2017.



Source: Association for the Advancement of Sustainability in Higher Education (AASHE) (US institutions participating in STARS as of May 2017).

FINANCIAL SUSTAINABILITY (FACILITIES CONDITION INDEX (FCI)) 

FCI provides one measure of the quality of our learning environment. It is calculated as a percentage of the total value of our supported asset pool requiring upgrades to various base building elements. A lower number is more favourable. Improvements in our FCI can result from investments in maintenance, changes in the replacement value of campus facilities, and the addition of new facilities. This is a measure that is impacted by increases or reductions in government funding.



Source (University of Calgary): Facilities Management (APPA Leadership in Educational Facilities).

Source (Top 5): Facilities Management (APPA Leadership in Educational Facilities); three Top 5 institutions reported.

Figure 37 – Financial Sustainability (Unrestricted Net Assets)

FINANCIAL SUSTAINABILITY (UNRESTRICTED NET ASSETS) (\$ MILLIONS)



One index of our leadership in the area of economic sustainability is the level of our Unrestricted Net Assets (UNA). Leading universities establish positive UNA balances to ensure that they have the resources needed to address challenges and leverage opportunities.

Source (University of Calgary): Audited financial statements.

Source (Top 5): CALIBO

Unrestricted net assets form a portion of net assets.

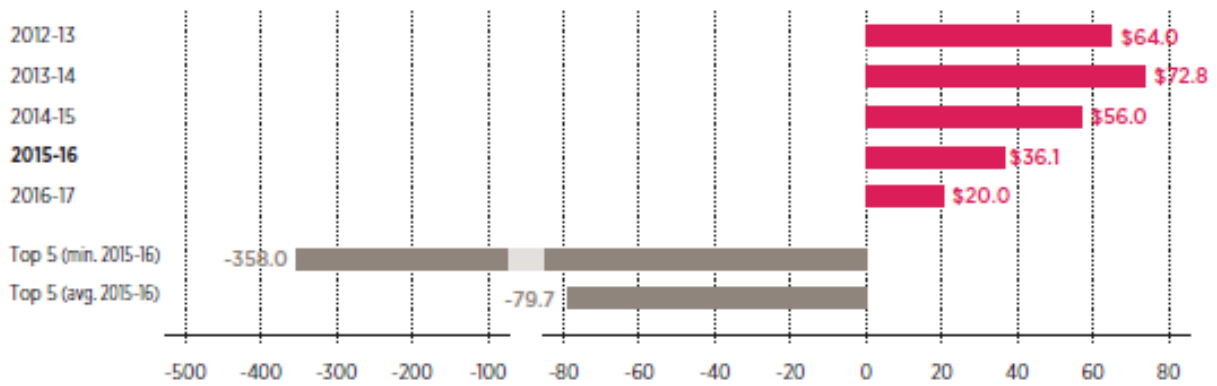


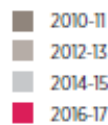
Figure 38 – Employee Engagement

EMPLOYEE ENGAGEMENT

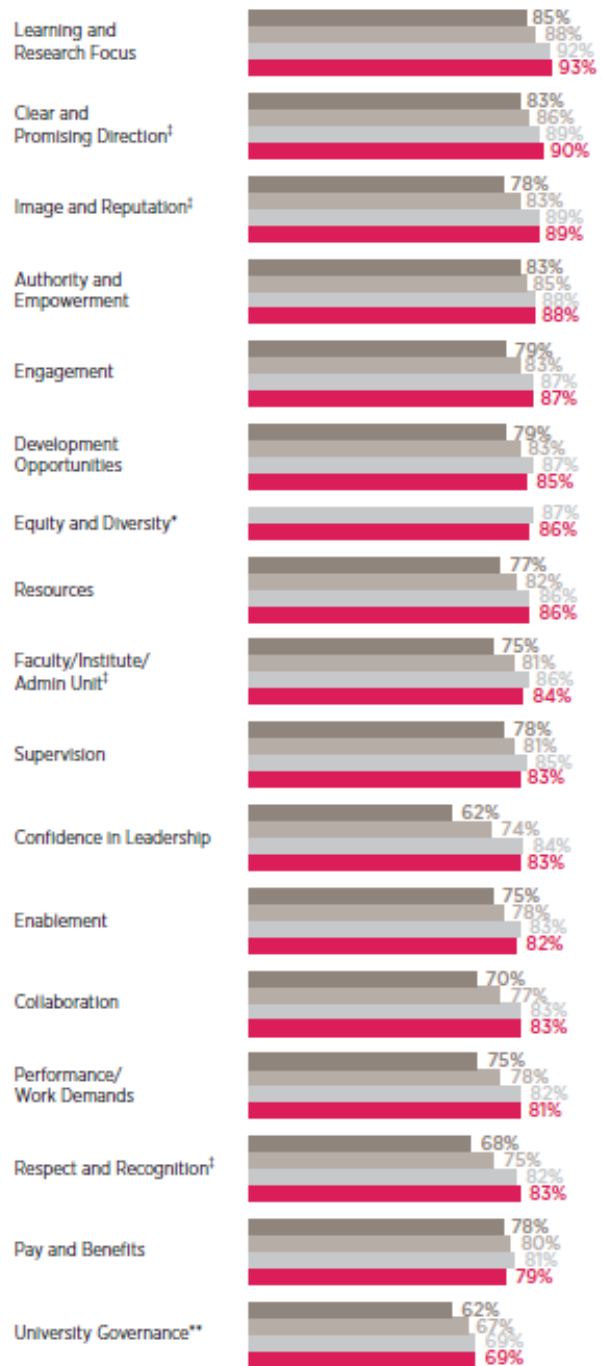
Employee engagement levels – though not measured against our peers as comparative data is unavailable – provide us with an important assessment of how well we work together to ensure a culture of respect and recognition, build commitment and trust in leadership, and create a ‘one university family’ environment. Results from our 2011 survey provided an important baseline from which to measure progress. Recent results from 2013, 2015 and 2017 demonstrate that we have made significant improvements, and remain equal to or better than public- and private-sector norms in many indicators. There is still work to be done, and we have plans in place to drive progress on key indicators.

In 2017, the participation rate was 56%, up from 47% in 2011.

Percent favourable/neutral



*Equity & Diversity was newly added in 2014-15.
 **University Issues was changed to University Governance.
 † Questions in these categories were added in 2017; results are not directly comparable.
 Note: University of Calgary data only; data is not shared among Top 5 peers.



11. Appendices

11.1 FINANCIAL STATEMENTS



UNIVERSITY OF CALGARY

Consolidated Financial Statements

For the Year Ended
March 31, 2017

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STATEMENT OF MANAGEMENT RESPONSIBILITY



The University of Calgary ("the University") is responsible for the preparation of the consolidated financial statements and has prepared them in accordance with Canadian Public Sector Accounting Standards as described in note 2 to the consolidated financial statements. The consolidated financial statements present fairly the financial position of the University as at March 31, 2017 and the results of its operations, changes in net financial assets, remeasurement gains and losses and cash flow for the year then ended.

In fulfilling its responsibilities and recognizing the limits inherent in all systems, the University has developed and maintains a system of internal control designed to provide reasonable assurance that the University's assets are safeguarded from loss and that the accounting records are a reliable basis for the preparation of the consolidated financial statements.

The Board of Governors is responsible for reviewing and approving the consolidated financial statements, and overseeing management's performance of its financial reporting responsibilities.

The Board of Governors carries out its responsibility for review of the consolidated financial statements principally through its Audit Committee. The Audit Committee meets with Management and the External Auditor to discuss the results of audit examinations and financial reporting matters. The External Auditor has full access to the Audit Committee, with and without the presence of Management.

The consolidated financial statements for the year ended March 31, 2017 have been reported on by the Auditor General of Alberta, the auditor appointed under *The Post-secondary Learning Act*. The Independent Auditor's Report outlines the scope of the audit and provides the audit opinion on the fairness of presentation of the information in the consolidated financial statements.

[Original signed by Elizabeth Cannon]
President & Vice-Chancellor

[Original signed by Linda Dalgetty]
Vice-President, Finance and Services



Independent Auditor's Report

To the Board of Governors of the University of Calgary

Report on the Consolidated Financial Statements

I have audited the accompanying consolidated financial statements of the University of Calgary, which comprise the consolidated statement of financial position as at March 31, 2017, and the consolidated statements of operations, change in net financial assets, remeasurement gains and losses, and cash flow for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on these consolidated financial statements based on my audit. I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Opinion

In my opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the University of Calgary as at March 31, 2017, and the results of its operations, its remeasurement gains and losses, its changes in net financial assets, and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

[Original signed by Merwan N. Saher FCPA, FCA]

Auditor General

May 26, 2017

Edmonton, Alberta

CONSOLIDATED STATEMENT OF FINANCIAL POSITION
AS AT MARCH 31, 2017
(in thousands)



	2017	2016
Financial assets excluding portfolio investments restricted for endowments		
Cash and cash equivalents (Note 3)	\$ 46,463	\$ 63,464
Portfolio investments - non-endowment (Note 4)	994,376	989,633
Accounts receivable	76,348	70,026
Inventory held for sale	6,340	5,748
Investment in government business enterprises (Note 6)	(7,294)	(3,625)
	\$ 1,116,233	\$ 1,125,246
Liabilities		
Accounts payable and accrued liabilities	\$ 147,621	\$ 147,564
Employee future benefit liabilities (Note 8)	127,507	133,775
Debt (Note 9)	236,834	254,989
Deferred revenue (Note 10)	554,138	537,553
	\$ 1,066,100	\$ 1,073,881
Net financial assets excluding portfolio investments restricted for endowments	\$ 50,133	\$ 51,365
Portfolio investments - restricted for endowments (Note 4)	\$ 888,099	\$ 772,337
Net financial assets	\$ 938,232	\$ 823,702
Non-financial assets		
Prepaid expenses	\$ 19,007	\$ 20,852
Tangible capital assets (Note 7)	1,810,250	1,795,078
	\$ 1,829,257	\$ 1,815,930
Net assets before spent deferred capital contributions	\$ 2,767,489	\$ 2,639,632
Spent deferred capital contributions (Note 11)	\$ 1,278,038	\$ 1,258,267
Net assets (Note 12)	\$ 1,489,451	\$ 1,381,365
Net assets is comprised of:		
Accumulated surplus	\$ 1,347,173	\$ 1,273,288
Accumulated rereasurement gains	142,278	108,077
	\$ 1,489,451	\$ 1,381,365

Contingent liabilities and guarantees, and contractual obligations (Note 13 and 14)

Approved by the Board of Governors:

[Original signed by Gordon Ritchie]

Chair, Board of Governors

[Original signed by Linda Dalgetty]

Vice-President, Finance and Services

The accompanying notes are an integral part of these consolidated financial statements

CONSOLIDATED STATEMENT OF OPERATIONS
YEAR ENDED MARCH 31, 2017
(in thousands)



	2017 Budget (Note 15)	2017	2016
Revenue			
Government of Alberta grants (Note 19)	\$ 631,417	\$ 632,851	\$ 612,119
Federal and other government grants	128,409	144,904	142,331
Sales of services and products	116,382	126,279	116,820
Student tuition and fees	219,520	226,481	219,235
Donations and other grants	140,632	131,681	145,988
Investment income (Note 16)	44,925	59,607	51,792
Investment loss in government business enterprises (Note 6)	(7,065)	(3,669)	(4,211)
	\$ 1,274,220	\$ 1,318,134	\$ 1,284,074
Expense			
Academic costs and institutional support	\$ 771,069	\$ 766,359	\$ 750,980
Research	323,366	361,691	343,794
Special purpose and trust	65,037	69,829	69,919
Facilities operations and maintenance	66,852	69,400	65,676
Ancillary services	47,896	46,510	42,455
	\$ 1,274,220	\$ 1,313,789	\$ 1,272,824
Annual operating surplus	\$ -	\$ 4,345	\$ 11,250
Endowment donations		29,071	25,283
Endowment capitalized investment income		40,469	5,835
Endowment donations and capitalized investment income		\$ 69,540	\$ 31,118
Annual surplus		\$ 73,885	\$ 42,368
Accumulated surplus, beginning of year		1,273,288	1,230,920
Accumulated surplus, end of year (Note 12)		\$ 1,347,173	\$ 1,273,288

The accompanying notes are an integral part of these consolidated financial statements

CONSOLIDATED STATEMENT OF CHANGE IN NET FINANCIAL ASSETS
YEAR ENDED MARCH 31, 2017
(in thousands)



	2017	2016
Annual surplus	\$ 73,885	\$ 42,368
Acquisition of tangible capital assets	(140,295)	(204,063)
Proceeds from sale of tangible capital assets	147	101
Amortization of tangible capital assets	124,432	118,993
Loss on disposal of tangible capital assets	544	3,550
Change in prepaid expenses	1,845	4,610
Change in spent deferred capital contributions	19,771	17,383
Change in accumulated remeasurement gains	34,201	(57,733)
Increase (decrease) in net financial assets	\$ 114,530	\$ (74,791)
Net financial assets, beginning of year	\$ 823,702	\$ 898,493
Net financial assets, end of year	\$ 938,232	\$ 823,702

The accompanying notes are an integral part of these consolidated financial statements

CONSOLIDATED STATEMENT OF REMEASUREMENT GAINS AND LOSSES
YEAR ENDED MARCH 31, 2017
(in thousands)



	2017	2016
Accumulated remeasurement gains, beginning of year	\$ 108,077	\$ 165,810
Unrealized gains (losses) attributable to:		
Foreign exchange	19	(304)
Portfolio investments - non-endowments	(4,216)	(7,723)
Portfolio investments - restricted for endowments	77,894	(29,161)
Amounts reclassified to consolidated statement of operations:		
Foreign exchange	304	22
Portfolio investments - non-endowments	(8,128)	(379)
Portfolio investments - restricted for endowments	(31,672)	(20,188)
Change in accumulated remeasurement gains	\$ 34,201	\$ (57,733)
Accumulated remeasurement gains, end of year (Note 12)	\$ 142,278	\$ 108,077
Accumulated remeasurement gains (losses) is comprised of:		
Portfolio investments - non-endowments	\$ (4,206)	\$ 8,138
Portfolio investments - restricted for endowments	146,465	100,243
Foreign exchange	19	(304)
	\$ 142,278	\$ 108,077

The accompanying notes are an integral part of these consolidated financial statements

CONSOLIDATED STATEMENT OF CASH FLOW
FOR THE YEAR ENDED MARCH 31, 2017
(in thousands)



	2017	2016
Operating transactions		
Annual surplus	\$ 73,885	\$ 42,368
Add (deduct) non-cash items:		
Amortization of tangible capital assets	124,432	118,993
Gain on sale of portfolio investments	(59,036)	(22,050)
Loss on disposal of tangible capital assets	544	3,550
Capital gifts in kind received	(1,167)	(19,022)
Change in investment in government business enterprises	3,669	4,211
(Decrease) increase in employee future benefit liabilities	(6,268)	1,203
Change in non-cash items	\$ 62,174	\$ 86,885
Increase in accounts receivable	(6,322)	(4,671)
Decrease in prepaid expenses	1,845	4,610
(Increase) decrease in inventory held for sale	(592)	131
Increase (decrease) in accounts payable and accrued liabilities	57	(9,189)
Increase (decrease) in deferred revenue	16,585	(292)
Increase in spent deferred capital contributions	19,771	17,383
Cash provided by operating transactions	\$ 167,403	\$ 137,225
Capital transactions		
Acquisition of tangible capital assets less gift in kind	\$ (139,128)	\$ (185,041)
Proceeds on sale of tangible capital assets	147	101
Cash applied to capital transactions	\$ (138,981)	\$ (184,940)
Investing transactions		
Purchases of portfolio investments	\$ (128,705)	\$ (218,388)
Proceeds on sale of portfolio investments	101,437	151,874
Cash applied to investing transactions	\$ (27,268)	\$ (66,514)
Financing transactions		
Debt - repayment	\$ (22,780)	\$ (22,281)
Debt - new financing	4,625	104
Cash applied to financing transactions	\$ (18,155)	\$ (22,177)
Decrease in cash and cash equivalents	\$ (17,001)	\$ (136,406)
Cash and cash equivalents, beginning of year	\$ 63,464	\$ 199,870
Cash and cash equivalents, end of year	\$ 46,463	\$ 63,464

The accompanying notes are an integral part of these consolidated financial statements

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEAR ENDED MARCH 31, 2017
(in thousands)**



1. Authority and purpose

The Governors of the University of Calgary is a corporation that manages and operates the University of Calgary ("the University") under the *Post-secondary Learning Act* (Alberta). All members of the Board of Governors are appointed by either the Lieutenant Governor in Council or the Minister of Advanced Education, with the exception of the Chancellor and President, who are *ex officio* members. Under the *Post-secondary Learning Act*, Campus Alberta Sector Regulation, the University is a comprehensive academic and research institution offering undergraduate and graduate degree programs as well as a full range of continuing education programs and activities. The University is a registered charity, and under section 149 of the *Income Tax Act* (Canada), is exempt from the payment of income tax. This tax exemption does not extend to its wholly-owned subsidiaries, University Technologies Group and West Campus Development Corporation.

2. Summary of significant accounting policies and reporting practices

(a) General – Canadian Public Sector Accounting Standards and use of estimates

These consolidated financial statements have been prepared in accordance with Canadian Public Sector Accounting Standards ("PSAS").

The measurement of certain assets and liabilities, revenues and expenses are contingent upon future events; therefore, the preparation of these consolidated financial statements requires the use of estimates, which may vary from actual results. Management uses judgment to determine such estimates. Amortization of tangible capital assets, recognition of deferred revenue related to restricted grants and donations, and employee future benefit liabilities are the most significant items based on estimates. In management's opinion, the resulting estimates are within reasonable limits of materiality and are in accordance with the significant accounting policies summarized below. These significant accounting policies are presented to assist the reader in evaluating these consolidated financial statements and, together with the following notes, should be considered an integral part of the consolidated financial statements.

(b) Valuation of financial assets and liabilities

The University's financial assets and liabilities are measured as follows:

Financial statement component	Measurement
Cash and cash equivalents	Cost or amortized cost
Portfolio investments	Fair value
Inventories held for sale	Lower of cost or net realizable value
Accounts receivable	Amortized cost
Accounts payable and accrued liabilities	Amortized cost
Debt	Amortized cost

Unrealized gains and losses from changes in the fair value of financial assets and liabilities are recognized in the consolidated statement of remeasurement gains and losses. When the restricted nature of a financial instrument and any related changes in fair value create a liability, unrealized gains and losses are recognized as deferred revenue.

All financial assets are tested annually for impairment. When financial assets are impaired, impairment losses are recorded in the consolidated statement of operations.

For financial assets and liabilities measured using amortized cost, the effective interest rate method is used to determine interest revenue or expense. Transaction costs are a component of cost for financial instruments measured using cost or amortized cost. Transaction costs are expensed for financial instruments measured at fair value. Investment management fees are expensed as incurred. The purchase and sale of cash and cash equivalents and portfolio investments are accounted for using trade-date accounting.

The University does not use foreign currency contracts or any other type of derivative financial instruments for trading or speculative purposes.

2. Summary of significant accounting policies and reporting practices (Continued)

(b) Valuation of financial assets and liabilities (Continued)

Management evaluates contractual obligations for the existence of embedded derivatives and elects to either designate the entire contract for fair value measurement or separately measure the value of the derivative component when characteristics of the derivative are not closely related to the economic characteristics and risks of the contract itself. Contracts to buy or sell non-financial items for the University's normal purchase, sale or usage requirements are not recognized as financial assets or liabilities. The University does not have any embedded derivatives.

(c) Revenue recognition

All revenue is reported on the accrual basis of accounting. Cash received for which goods or services have not been provided is recognized as deferred revenue.

Government grants, non-government grants and donations

Government transfers are referred to as government grants.

Restricted grants and donations are recognized as deferred revenue if the terms for use, or the terms along with the University's actions and communications as to the use, create a liability. These grants and donations are recognized as revenue as the terms are met. If the grants and donations are used to acquire or construct tangible capital assets, revenue will be recognized over the useful life of the tangible capital asset.

Government grants without terms for the use of the grant are recognized as revenue when the University is eligible to receive the funds. Unrestricted non-government grants and donations are recognized as revenue in the year received or in the year the funds are committed to the University if the amount can be reasonably estimated and collection is reasonably assured.

In-kind donations of services, materials, and tangible capital assets are recognized at fair value when such value can reasonably be determined. Transfers of tangible capital assets from related parties are recorded at the carrying value.

Grants and donations related to land

Grants and donations for the purchase of land are recognized as deferred revenue when received and recognized as revenue when the land is purchased. An in-kind grant or donation of land is recognized as revenue at the fair value of the land when a fair value can be reasonably determined. When the fair value cannot reasonably be determined, the in-kind grant or donation is recorded at nominal value.

Investment income

Investment income includes dividends, interest income, and realized gains or losses on the sale of portfolio investments. Unrealized gains and losses on investments from unrestricted grants and donations are recognized in the accumulated remeasurement gains and losses until settlement. Once realized, these gains and losses are recognized as revenue or expense in the consolidated statement of operations. Investment income from restricted grants and donations is recognized as deferred revenue when the terms for use create a liability, and is recognized as revenue in the consolidated statement of operations when the terms of the grants or donations are met.

Realized investment income allocated to endowment balances for the preservation of endowment capital purchasing power is recognized in the statement of operations as a component of endowment donations and capitalized investment income.

Endowments

Endowments consist of externally restricted donations received by the University and internal allocations by the University's Board of Governors, the principal of which is required to be maintained intact in perpetuity.

2. **Summary of significant accounting policies and reporting practices (Continued)**

(c) Revenue recognition (Continued)

Investment income earned on endowments must be used in accordance with the various purposes established by the donors or the Board of Governors. Benefactors as well as University's policy stipulate that the economic value of the endowments must be protected by limiting the amount of income that may be expended and reinvesting unexpended income.

Under the *Post-secondary Learning Act*, the University has the authority to alter the terms and conditions of endowments to enable:

- income earned by the endowment to be withheld from distribution to avoid fluctuations in the amounts distributed and generally to regulate the distribution of income earned by the endowment.
- encroachment on the capital of the endowment to avoid fluctuations in the amounts distributed and generally to regulate the distribution of income earned by the endowment if, in the opinion of the Board of Governors, the encroachment benefits the University and does not impair the long-term value of the fund.

In any year, if the investment income earned on endowments is insufficient to fund the spending allocation, the spending allocation is funded from the cumulative capitalized investment income. However, for individual endowment funds without sufficient cumulative capitalized income, endowment principal is used in that year. This amount is expected to be recovered by future investment income.

Endowment donations and associated investment income allocated for the preservation of endowment capital purchasing power are recognized in the Consolidated Statement of Operations in the period in which they are received.

(d) Inventory held for sale

Inventory held for sale is valued at the lower of cost and expected net realizable value and is determined using the weighted average method. Inventory held for consumption is valued at cost.

(e) Tangible capital assets

Tangible capital assets are recorded at cost, which include amounts that are directly related to the acquisition, design, construction, development, improvement or betterment of the asset, and costs associated with asset retirement obligations. Cost includes overhead directly attributable to construction and development, as well as interest costs that are directly attributable to the acquisition or construction of the asset. Work in progress, which includes facilities and improvement projects and development of information systems, is not amortized until after the project is complete and the asset is in service. Assets or disposal groups that are classified as held for sale are measured at the lower of carrying amount and fair value less costs to sell.

The cost, less residual value, of the tangible capital assets, excluding land, is amortized on a straightline basis over their estimated useful lives as follows:

Buildings	20-40 years
Furnishings, equipment and systems	3-10 years
Learning resources	10 years

Tangible capital assets writedowns are recorded when conditions indicate they no longer contribute to the University's ability to provide services, or when the value of future economic benefits associated with the capital assets are less than their net book value. The net write-downs are recognized as expense in the consolidated statement of operations. Intangible assets, works of art, historical treasures and collections are expensed when acquired and not recognized as tangible capital assets.

(f) Foreign currency translation

Transaction amounts denominated in foreign currencies are translated into their Canadian dollar equivalents at exchange rates prevailing at the transaction dates. Carrying values of monetary assets and liabilities and non-monetary items included in the fair value category reflect the exchange rates at the consolidated statement of financial position date. Unrealized foreign exchange gains and losses are recognized in the consolidated statement of remeasurement gains and losses.

2. Summary of significant accounting policies and reporting practices (Continued)

(f) Foreign currency translation (Continued)

In the period of settlement, foreign exchange gains and losses are reclassified to the consolidated statement of operations, and the cumulative amount of remeasurement gains and losses is reversed in the consolidated statement of remeasurement gains and losses.

(g) Employee future benefits

Pension

The University participates with other employers in the Public Service Pension Plan (PSPP) and the Universities Academic Pension Plan (UAPP). These pension plans are multi-employer defined benefit pension plans that provide pensions for the University's participating employees based on years of service and earnings.

Pension expense for the UAPP is actuarially determined using the projected benefit method prorated on service and is allocated to each participant based on their respective percentage of pensionable earnings. Actuarial gains or losses on the accrued benefit obligation are amortized over the expected average remaining service life.

The University does not have sufficient plan information on the PSPP to follow the standards for defined benefit accounting, and therefore follows the standards for defined contribution accounting. Accordingly, pension expense recorded for the PSPP is comprised of employer contributions to the plan that are required for its employees during the year, which are calculated based on actuarially predetermined amounts that are expected to provide the plan's future benefits.

Supplementary retirement plan (SRP)

The pension expense for defined benefit SRP is actuarially determined using the projected benefit method prorated on service. Actuarial gains or losses on the accrued benefit obligation are amortized over the expected service lifetime for each plan participant.

(h) Investment in government not for profit organization and government partnership

The consolidated financial statements include the financial results of the Arctic Institute of North America ("AINA"), a nonprofit organization controlled by the University. AINA operates under the authority of the Act of the Federal Parliament (910 George VI, Chapter 45) to initiate, encourage and support northern research and to advance the study of arctic conditions.

Proportionate consolidation is used to record the University's share of the following government partnerships:

- Tri-University Meson Facility (TRIUMF) (8.33% interest) - a joint venture with eleven other universities to operate a subatomic physics research facility.
- Western Canadian Universities Marine Sciences Society (20% interest) - a government partnership with five other universities to provide research infrastructure in the marine sciences for its member universities and the worldwide scientific community.

All government partnership inter-entity accounts and transactions between these organizations are eliminated upon consolidation.

(i) Investment in government business enterprises

Government business enterprises, owned or controlled by the University but not dependent on the University for their continuing operations, are included in the consolidated financial statements using the modified equity method. Under the modified equity method, the equity method of accounting is modified only to the extent that the business entity accounting principles are not adjusted to conform to those of the University. Thus, the University's investment in these entities is recorded at acquisition cost and is increased for the proportionate share of post acquisition earnings and decreased by post acquisition losses and distributions received. Wholly-owned entities accounted for by the modified equity basis include University Technologies Group ("UTI") and West Campus Development Corporation ("WCDC").

2. Summary of significant accounting policies and reporting practices (Continued)

(j) Funds and reserves

Certain amounts, as approved by the Board of Governors, are set aside in accumulated surplus for future operating and capital purposes. Transfers to / from funds and reserves are an adjustment to the respective fund when approved.

(k) Expense by Function

The University uses the following function categories on its consolidated statement of operations:

Academic costs and institutional support

Academic costs and institutional support includes expenses relating to activities directly and indirectly supporting innovative learning, programming, and teaching as well as administration and governance functions of the University.

Research

Research expenses relate primarily to activity funded by externally sponsored research funds intended for specific research purposes as well as internal funds designated for research related spending.

Special purpose and trust

Special purpose and trust is comprised of expenses relating to externally restricted funding for non-research related activities including scholarships and community service.

Facilities operations and maintenance

Facilities operations and maintenance function includes centralized management and maintenance of grounds and facilities, and buildings. Examples include utilities, facilities administration, building maintenance, custodial services, landscaping and grounds keeping, and major repairs and renovations.

Ancillary services

Ancillary expenses relate to secondary services available to students, faculty, and staff. Services include on campus residence, food services, university bookstores, Hotel Alma, and conference services.

(l) Future accounting changes

In March 2015, the Public Sector Accounting Board issued PS 2200 Related party disclosures and PS 3420 Inter-entity transactions. In June 2015, the Public Sector Accounting Board issued PS 3210 Assets, PS 3320 Contingent assets, PS 3380 Contractual rights, and PS 3430 Restructuring transactions. These accounting standards are effective for fiscal years starting on or after April 1, 2017, with the exception of PS 3430, which is effective for fiscal years starting on or after April 1, 2018.

- PS 2200 - Related party disclosures defines a related party and identifies disclosures for related parties and related party transactions, including key management personnel and close family members.
- PS 3420 - Inter-entity transactions, establishes standards on how to account for and report transactions between public sector entities that comprise a government's reporting entity from both a provider and recipient perspective.
- PS 3210 - Assets provides guidance for applying the definition of assets set out in PS 1000, Financial statement concepts, and establishes general disclosure standards for assets.
- PS 3320 - Contingent assets defines and establishes disclosure standards for contingent assets.
- PS 3380 - Contractual rights defines and establishes disclosure standards on contractual rights.
- PS 3430 - Restructuring transactions defines a restructuring transaction and establishes standards for recognizing and measuring assets and liabilities transferred in a restructuring transaction.

Management is currently assessing the impact of these new standards on the consolidated financial statements. The University discloses transactions and balances related to the Government of Alberta in Note 19.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEAR ENDED MARCH 31, 2017
(in thousands)**



3. Cash and cash equivalents

	2017		2016	
Cash	\$	46,463	\$	63,445
Money market funds		-		19
	\$	46,463	\$	63,464

Cash and cash equivalents include short-term investments with a maturity less than three months from the date of acquisition.

4. Portfolio investments

	2017		2016	
Portfolio investments - non-endowment	\$	994,376	\$	989,633
Portfolio investments - restricted for endowments		888,099		772,337
	\$	1,882,475	\$	1,761,970

The composition of portfolio investments measured at fair value is as follows:

	2017			
	Level 1	Level 2	Level 3	Total
Portfolio investments at fair value:				
Bonds				
Canadian government and corporate	\$ -	\$ 539,045	\$ -	\$ 539,045
Pooled investments funds	-	159,755	-	159,755
Equities				
Canadian equities	138,022	-	-	138,022
Foreign equities	2,302	-	-	2,302
Pooled investments funds	-	549,295	-	549,295
Other				
Cash and money market funds	39,514	-	-	39,514
Guaranteed investment certificate (GICs)	-	181,311	-	181,311
Canadian mortgages	-	273,231	-	273,231
	\$ 179,838	\$ 1,702,637	\$ -	\$ 1,882,475

	2016			
	Level 1	Level 2	Level 3	Total
Portfolio investments at fair value:				
Bonds				
Canadian government and corporate	\$ -	\$ 541,312	\$ -	\$ 541,312
Pooled investments funds	-	197,706	-	197,706
Equities				
Canadian equities	106,123	-	-	106,123
Foreign equities	3,861	-	-	3,861
Pooled investments funds	-	463,571	-	463,571
Other				
Cash and money market funds	32,614	-	-	32,614
Guaranteed investment certificate (GICs)	-	151,308	-	151,308
Canadian mortgages	-	219,679	-	219,679
Floating rate notes	-	-	45,796	45,796
	\$ 142,598	\$ 1,573,576	\$ 45,796	\$ 1,761,970

4. Portfolio investments (Continued)

The above tables provide an analysis of financial instruments that are measured subsequent to initial recognition at fair value, grouped into levels 1 to 3 based on the degree to which the fair value is observable:

Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets.

Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the assets, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Level 3 fair value measurements are those derived from valuation techniques that include inputs for the assets that are not based on observable market data (unobservable inputs).

Floating rate notes:

At March 31, 2016, the University held \$45,796 in floating rate notes comprised of Synthetic Assets and Ineligible Tracking (IA) notes. The floating rate notes matured during the fiscal year and the University sold the floating rate notes for total proceeds of \$46,179.

5. Financial risk management

Market price risk

The University is exposed to market price risk, the risk that the value of a financial instrument will fluctuate as a result of changes in market prices, whether those changes are caused by factors specific to the individual security, its issuer or general market factors affecting all securities. To manage this risk, the University has established an investment policy with a target asset mix that is diversified by asset class with individual issuer limits and is designed to achieve a long-term rate of return that in real terms equals or exceeds total endowment expenditures with an acceptable level of risk.

The following details the University's portfolio sensitivity to a 5.9% increase or decrease in the market prices. The sensitivity rate is determined using the historical annualized standard deviation for the portfolio investments over a four year period. At March 31, 2017, if market prices had a 5.9% (2016 - 6.4%) increase or decrease with all other variables held constant, the increase or decrease in accumulated remeasurement gains and losses, net assets, and deferred revenue for the year would have totalled \$98,532 (2016 - \$101,000).

The University's management of market price risk has not changed from the prior year.

Foreign currency risk

Foreign currency is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The University is exposed to foreign currency risk on investments that are denominated in foreign currencies, specifically U.S. dollars. The University does not use currency hedging or currency forward contracts or any other type of derivative financial instruments for trading or speculative purposes.

The University has a contract with the Qatari government to operate a campus in Qatar. Expenses incurred are recovered from the government of Qatar and claims are adjusted to reflect currency fluctuations, thus reducing exchange risk exposure to the University.

Credit risk

The University is exposed to credit risk on investments arising from the potential failure of a counterparty, debtor or issuer to honour its contractual obligations. To manage this risk, the University only invests in investment grade issuers as guided by the University's Investment policy. The credit risk from accounts receivable is relatively low as the majority of balances are due from government agencies and corporate sponsors. Credit risk from tuition is managed through restricted enrolment activities for students with delinquent balances and maintaining standard collection procedures.

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5. Financial risk management (Continued)

The credit rating for Canadian government and corporate bonds held is as follows:

Credit Rating	2017	2016
AAA	56.06 %	36.90 %
AA	20.80 %	30.73 %
A	10.49 %	10.78 %
BBB	12.65 %	21.59 %
	100.00 %	100.00 %

Liquidity risk

Liquidity risk is the risk that the University will encounter difficulty in meeting obligations associated with its financial liabilities. The University maintains a line of credit designed to ensure availability of funds to meet current and forecasted financial requirements as cost effectively as possible. At March 31, 2017, the University has committed borrowing facilities of \$16,750 (2016 - \$15,000) none of which has been drawn.

Interest rate risk

Interest rate risk is the risk that future cash flows or fair values will fluctuate due to the volatility of market interest rates. The University is exposed to this risk on its interest bearing assets and bonds. Bonds are affected indirectly as they are subject to fluctuations in market values. Bonds are currently invested at the shorter end of the yield curve to reduce market value volatility. Interest risk on the University's debt is managed through fixed-rate agreements with Alberta Capital Finance Authority (note 9).

The terms to maturity of interest-bearing securities held by the University are as follows:

Asset class	< 1 year	1 - 5 years	> 5 years	Average effective market yield
Money market funds and GICs	100.00 %	-	-	1.16 %
Canadian government and corporate bonds	10.69 %	83.83 %	5.48 %	1.31 %
Canadian mortgage fund	24.72 %	42.96 %	32.32 %	2.94 %

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6. Investment in government business enterprises

UTI and WCDC are wholly-owned subsidiaries of the University of Calgary. UTI operates to facilitate the transfer of intellectual property from the University to private business, thereby commercializing the scientific innovations of University researchers. The WCDC operates as trustee of the West Campus Development Trust ("WCDCDT"), which will sublease land to developers for the commercialization of residential and commercial development. The University is the beneficiary of WCDCDT and will receive distributions from the trust once leases are in place with developers and net proceeds are available.

The following table provides condensed supplementary financial information reported separately for each Investment in Government Business Enterprise owned by the University; namely UTI and WCDCDT.

	UTI		WCDCDT		Total	
	2017	2016	2017	2016	2017	2016
Assets						
Cash	\$ 4,753	\$ 5,219	\$ -	\$ -	\$ 4,753	\$ 5,219
Accounts receivable	252	206	344	561	596	767
Promissory notes receivable	33	44	-	-	33	44
Deposit	-	-	6,598	150	6,598	150
Prepaid expenses	-	-	25	23	25	23
Investments	738	907	-	-	738	907
Capital assets	3	12	1,385	120	1,388	132
Development costs	-	-	19,724	8,046	19,724	8,046
Intangible assets	951	783	99	158	1,050	941
	\$ 6,730	\$ 7,171	\$ 28,175	\$ 9,058	\$ 34,905	\$ 16,229
Liabilities						
Accounts payable and accrued liabilities	\$ 279	\$ 479	\$ 7,756	\$ 6,292	\$ 8,035	\$ 6,771
Income taxes payable	4	4	-	-	4	4
Deferred revenue	26	61	3,448	-	3,474	61
Long term debt	-	-	30,686	13,018	30,686	13,018
	\$ 309	\$ 544	\$ 41,890	\$ 19,310	\$ 42,199	\$ 19,854
Equity						
Share capital	\$ 5,233	\$ 5,233	-	-	\$ 5,233	\$ 5,233
Surplus (deficit)	1,188	1,394	(13,715)	(10,252)	(12,527)	(8,858)
	\$ 6,421	\$ 6,627	\$ (13,715)	\$ (10,252)	\$ (7,294)	\$ (3,625)
	\$ 6,730	\$ 7,171	\$ 28,175	\$ 9,058	\$ 34,905	\$ 16,229
	2017	2016	2017	2016	2017	2016
Net Income (loss)						
Revenues	\$ 222	\$ 228	\$ 381	\$ -	\$ 603	\$ 228
Expenses	428	871	3,844	3,568	4,272	4,439
	\$ (206)	\$ (643)	\$ (3,463)	\$ (3,568)	\$ (3,669)	\$ (4,211)

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
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7. Tangible capital assets

	2017				2016	
	Buildings	Furnishings, equipment and systems	Learning resources	Land	Total	Total
Cost						
Beginning of year	\$ 2,414,010	\$ 848,224	\$ 217,654	\$ 14,082	\$ 3,493,970	\$ 3,310,437
Acquisitions	101,107	30,993	8,195	-	140,295	204,063
Disposals	(1,794)	(4,349)	(1,009)	-	(7,152)	(20,530)
	\$ 2,513,323	\$ 874,868	\$ 224,840	\$ 14,082	\$ 3,627,113	\$ 3,493,970
Accumulated amortization						
Beginning of year	\$ 830,217	\$ 692,931	\$ 175,744	\$ -	\$ 1,698,892	\$ 1,596,778
Amortization expense	70,515	44,969	8,948	-	124,432	118,993
Disposals	(1,153)	(4,299)	(1,009)	-	(6,461)	(16,879)
	\$ 899,579	\$ 733,601	\$ 183,683	\$ -	\$ 1,816,863	\$ 1,698,892
Net book value at March 31, 2017	\$ 1,613,744	\$ 141,267	\$ 41,157	\$ 14,082	\$ 1,810,250	\$ 1,795,078
Net book value as at March 31, 2016	\$ 1,583,793	\$ 155,293	\$ 41,910	\$ 14,082	\$ 1,795,078	

Acquisitions of tangible capital assets include capitalized interest of \$411 (2016 - \$1,854).

Tangible capital assets include work-in-process at March 31, 2017 totaling \$62,660 (2016 - \$145,492) comprised of buildings \$55,753 (2016 - \$131,931) and furnishings, equipment and systems \$6,907 (2016 - \$13,561). Work-in-process is not amortized as the assets are not available for use.

Acquisitions during the year included in-kind contributions (such as learning resources, equipment and software) in the amount of \$1,167 (2016 - \$19,022).

8. Employee future benefit liabilities

Employee future benefit liabilities are comprised of the following:

	2017	2016
Universities Academic Pension Plan	\$ 113,844	\$ 120,560
Long-term Disability	2,087	2,306
Administrative Leave (Note 20)	751	628
Supplementary Retirement Plan	10,825	10,281
	\$ 127,507	\$ 133,775

(a) Defined benefit plans accounted for on a defined benefit basis

UAPP

The UAPP is a multi-employer contributory joint defined benefit pension plan for academic and professional staff members. An actuarial valuation of the UAPP was completed as at December 31, 2014 and was then extrapolated to March 31, 2017, resulting in a UAPP deficiency of \$763,861 (2016 - \$868,735) consisting of a pre-1992 deficiency of \$806,430 and a post-1991 surplus of \$42,569. The University's portion of the UAPP pre-1992 deficiency and post-1991 surplus has been allocated based on its percentage of the plan's total employer contributions for the year.

The unfunded deficiency for service prior to January 1, 1992 is financed by additional contributions of 1.25% (2016 - 1.25%) of salaries by the Government of Alberta. Employees and employers equally share the balance of the contributions of 3.54% (2016 - 3.54%) of salaries required to eliminate the unfunded deficiency by December 31, 2043. The Government of Alberta's obligation for the future additional contributions was \$293,557 at March 31, 2017.

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8. Employee future benefit liabilities (Continued)

SRP

The University provides non-contributory defined benefit supplementary retirement benefits to executives. An actuarial valuation of these benefits was carried out as at March 31, 2017.

The expenses and financial position of these defined benefit plans are as follows:

	March 31, 2017			March 31, 2016		
	UAPP	Long term disability ⁽¹⁾	SRP ⁽¹⁾	UAPP	Long term disability ⁽¹⁾	SRP ⁽¹⁾
Expenses						
Current service cost	\$ 32,209	\$ 566	\$ 520	\$ 30,497	\$ 601	\$ 606
Interest cost	7,119	53	329	9,560	48	287
Amortization of net actuarial losses (gains)	(1,077)	(616)	71	2,511	(489)	259
Total expenses	\$ 38,251	\$ 3	\$ 920	\$ 42,568	\$ 160	\$ 1,152
Financial Position						
Accrued benefit obligation:						
Balance, beginning of year	\$ 819,450	\$ 2,306	\$ 10,634	\$ 785,878	\$ 2,360	\$ 11,057
Current service cost	32,209	566	520	30,497	601	606
Interest cost	50,042	53	329	48,720	48	287
Benefits paid	(35,260)	(222)	(376)	(35,383)	(214)	(373)
Actuarial gain	(31,571)	(616)	(189)	(10,262)	(489)	(943)
Balance, end of year	\$ 834,870	\$ 2,087	\$ 10,918	\$ 819,450	\$ 2,306	\$ 10,634
Plan assets	749,886	-	-	710,521	-	-
Plan deficit	\$ (84,984)	\$ (2,087)	\$ (10,918)	\$ (108,929)	\$ (2,306)	\$ (10,634)
Unamortized net actuarial (gain) loss	\$ (28,860)	\$ -	\$ 93	\$ (11,631)	\$ -	\$ 353
Accrued benefit liability	\$ (113,844)	\$ (2,087)	\$ (10,825)	\$ (120,560)	\$ (2,306)	\$ (10,281)

⁽¹⁾ The University plans to use its working capital to finance these future obligations.

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8. Employee future benefit liabilities (Continued)

The significant actuarial assumptions used to measure the accrued benefit obligation are as follows:

	March 31, 2017			March 31, 2016		
	UAPP	Long term disability	SRP	UAPP	Long term disability	SRP
Accrued benefit obligation:						
Discount rate	6.00 %	2.40 %	3.10 %	6.00 %	2.40 %	3.00 %
Long term average compensation increase	3.00 %	n/a	3.00 %	3.00 %	n/a	3.00 %
Benefit cost:						
Discount rate	6.00 %	2.40 %	3.00 %	6.00 %	2.40 %	2.50 %
Long term average compensation increase	3.00 %	n/a	3.00 %	3.00 %	n/a	3.00 %
Alberta inflation (long term)	2.00 %	n/a	1.50 %	2.00 %	n/a	1.50 %
Estimated average remaining service life	10.8 yrs	7.28 yrs	5.0 yrs	10.8 yrs	7.53 yrs	6.0 yrs

(b) Defined benefit plans accounted for on a defined contribution basis

PSPP

PSPP is a multi-employer contributory defined benefit pension plan for support staff members. As the University does not have sufficient information to follow the accounting standards for defined benefit plans, PSPP is accounted for on a defined contribution basis. The pension expense recorded in these consolidated financial statements is \$24,216 (2016 - \$22,810).

An actuarial valuation of the PSPP was carried out as at December 31, 2014 and was then extrapolated to December 31, 2016. At December 31, 2016, the PSPP reported an actuarial surplus of \$302,975 (2015 actuarial deficit - \$133,188). For the year ended December 31, 2016 PSPP reported employer contributions of \$350,083 (2014 - \$347,759). For the 2016 calendar year, the University's employer contributions were \$24,317 (2015 - \$22,718).

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
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9. Debt

Debt is measured at amortized cost and is comprised of the following:

	Collateral	Maturity date	Interest rate %	2017	2016
Debtures payable to Alberta Capital Finance Authority:					
Debture for Schulich Expansion	(1)	December 2017	1.61%	\$ 15,362	\$ 30,480
Debture for Cascade Hall	(1)	May 2025	6.25%	8,892	9,613
Debture for Residence Renewal Program	(1)	September 2026	4.43%	10,602	11,482
Debture for Downtown Campus	(2)	March 2031	4.27%	11,741	12,343
Debture for Health Renovation Innovation Centre/Parkade	(1)	April 2031	4.94%	4,281	4,479
Debture for Utilities Reduction Program	(1)	September 2031	2.15%	4,372	-
Debture for Child Development Centre	(1)	June 2032	5.25%	1,482	1,543
Debture for International Residence House	(1)	September 2032	4.69%	19,772	20,624
Debture for Residences	(1)	December 2038	3.90%	80,886	83,176
Debture for International Residence House	(1)	June 2039	5.10%	25,764	26,365
Debture for Phase VI Residence	(1)	March 2040	4.73%	53,257	54,517
Bank loans payable:					
Demand loan for Western Canadian Universities Marine Sciences Society	(3)	March 2020	3.50%	-	4
Demand loan for Western Canadian Universities Marine Sciences Society	(3)	April 2020	3.39%	243	259
				\$ 236,654	\$ 254,885
Obligations under capital leases				\$ 180	\$ 104
				\$ 236,834	\$ 254,989

(1) general security agreement; (2) title to land, building; (3) none

Interest expense on debt recorded in these consolidated statements is \$10,475 (2016 - \$9,012) of which \$411 (2016 - \$1,854) was capitalized. Principal and interest repayments are as follows:

	Principal	Interest	Total
2018	\$ 23,487	\$ 9,943	\$ 33,430
2019	8,492	9,388	17,880
2020	8,865	9,002	17,867
2021	9,444	8,592	18,036
2022	9,670	8,169	17,839
Thereafter	176,876	68,938	245,814
	\$ 236,834	\$ 114,032	\$ 350,866

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
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10. Deferred revenue

	2017		
	Unspent externally restricted grants and donations	Tuition and other fees	Total
Balance, beginning of year	\$ 512,322	\$ 25,231	\$ 537,553
Grants, tuition and donations received	481,698	236,585	718,283
Investment income	25,970	-	25,970
Transfer to spent deferred capital contributions	(105,917)	-	(105,917)
Recognized as revenue	(381,250)	(240,501)	(621,751)
	\$ 532,823	\$ 21,315	\$ 554,138

	2016		
	Unspent externally restricted grants and donations	Tuition and other fees	Total
Balance, beginning of year	\$ 512,275	\$ 25,570	\$ 537,845
Grants, tuition and donations received	462,020	213,090	675,110
Investment income	23,223	-	23,223
Transfer to spent deferred capital contributions	(101,932)	-	(101,932)
Recognized as revenue	(383,264)	(213,429)	(596,693)
	\$ 512,322	\$ 25,231	\$ 537,553

11. Spent deferred capital contributions

Spent deferred capital contributions is comprised of externally restricted grants and donations spent on tangible capital acquisitions (not yet recognized as revenue).

	2017	2016
Balance, beginning of year	\$ 1,258,267	\$ 1,240,885
Transfer from unspent externally restricted grants and donations	105,917	101,932
Recognized as revenue	(86,146)	(84,550)
	\$ 1,278,038	\$ 1,258,267

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
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12. Net Assets

	2017				2016	
	Unrestricted	Investment in tangible capital assets	Internally restricted	Endowments	Total	Total
Net Assets, beginning of year	\$ 43,904	\$ 281,821	\$ 283,303	\$ 772,337	\$ 1,381,365	\$ 1,396,730
Annual operating surplus	4,345	-	-	-	4,345	11,250
Transfer to internally restricted net of expenditures	(40,030)	-	40,030	-	-	-
Endowment						
New contributions	-	-	-	29,071	29,071	25,283
Capitalized investment income	-	-	-	40,469	40,469	5,835
Tangible capital assets						
Acquisition of capital assets	(13,166)	34,378	(21,212)	-	-	-
Amortization of capital assets	38,977	(38,977)	-	-	-	-
Debt repayment	(7,534)	22,652	(15,118)	-	-	-
Debt - new financing	1,366	(1,366)	-	-	-	-
Change in accumulated remeasurement gains	(12,021)	-	-	46,222	34,201	(57,733)
Net assets at March 31, 2017	\$ 15,841	\$ 298,508	\$ 287,003	\$ 888,099	\$ 1,489,451	\$ 1,381,365
Net assets is comprised of:						
Accumulated surplus	\$ 20,028	\$ 298,508	\$ 287,003	\$ 741,634	\$ 1,347,173	\$ 1,273,288
Accumulated remeasurement (losses) gains	(4,187)	-	-	146,465	142,278	108,077
Net assets at March 31, 2017	\$ 15,841	\$ 298,508	\$ 287,003	\$ 888,099	\$ 1,489,451	\$ 1,381,365

Internally restricted net assets

Internally restricted net assets represent amounts set aside by the University's Board of Governors for strategic initiatives in support of student learning, research, capital projects and community service. Those amounts are not available for other purposes without the approval of the Board and do not have interest allocated to them. Internally restricted net assets are summarized as follows:

	2017		2016	
Capital projects	\$	61,937	\$	23,825
Academic and institutional initiatives		145,116		169,552
Research activities		79,950		89,926
	\$	287,003	\$	283,303

13. Contingent liabilities and guarantees

The University is a defendant in a number of legal proceedings arising in the normal course of business. While the ultimate outcome and liability of these proceedings cannot be reasonably estimated at this time, the University believes that any settlement will not have a material adverse effect on the financial position or the results of operations of the University. Management has concluded that none of the claims meet the criteria for recording a liability.

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13. Contingent liabilities and guarantees (Continued)

The University has identified potential asset retirement obligations related to the existence of asbestos in a number of its facilities. Although not a current health hazard, upon renovation or demolition of these facilities, the University may be required to take appropriate remediation procedures to remove the asbestos. As the University has no legal obligation to remove the asbestos in these facilities as long as the asbestos is contained and does not pose a public health risk, the fair value of the obligation cannot be reasonably estimated due to the indeterminate timing and scope of the removal. The asset retirement obligations for these assets will be recorded in the period in which there is certainty that the remediation project will proceed and there is sufficient information to estimate fair value of the obligation.

At March 31, 2017 the University had entered into agreements that provide guarantees on employee housing loans in the amount of \$725 (2016 - \$749). These amounts are not recorded in the consolidated financial statements.

14. Contractual obligations

The University has contractual obligations which are commitments that will become liabilities in the future when the terms of the contracts or agreements are met.

The estimated aggregate amount payable for the unexpired terms of these contractual obligations are as follows:

	Service Contracts	Capital Projects	Long term leases	Total
2018	\$ 44,918	\$ 46,162	\$ 7,004	\$ 98,084
2019	9,160	-	7,058	16,218
2020	1,780	-	6,906	8,686
2021	1,288	-	7,080	8,368
2022	-	-	7,026	7,026
Thereafter	-	-	49,984	49,984
	\$ 57,146	\$ 46,162	\$ 85,058	\$ 188,366

Included in service contracts are outstanding supplies and services purchase orders and contracts to purchase electricity and natural gas. To manage its risk exposure to electricity and natural gas prices, the University has entered into an Electricity Purchase Agreement, expiring March 31, 2019 and an Energy Purchase Agreement expiring October 31, 2018 based on indexed (floating on the spot market) prices with an option to hedge any portion of the requirement at any time. At March 31, 2017 the University had hedged a portion of these contracts by fixing the price on a portion of its estimated electricity and natural gas consumption. Using best estimates of future consumption and forward market prices on March 31, 2017, the estimated contractual obligations including executed hedge contracts are \$9,433 (2016 - \$6,036) for electricity and \$14,590 (2016 - \$20,347) for natural gas.

The University is one of 58 members of CURIE, the Canadian Universities Reciprocal Insurance Exchange, a self-insurance reciprocal established to share the insurable property, liability, and errors and omissions risks of member universities. The projected cost of claims against the exchange is based on actuarial projections and is funded through members' premiums. As at December 31, 2016 CURIE had a surplus of \$16,583 (2015 - \$3,033). The University participates in six of the underwriting periods, which have an accumulated surplus of \$84,908 (2015 - \$69,679) of which the University's pro rata share is approximately 6.83% (2015 - 5.91%). This surplus is not recorded in the consolidated financial statements.

15. Budget comparison

Budgeted figures have been provided for comparison purposes and have been derived from the University's Comprehensive Institutional Plan as approved by the Board of Governors.

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16. Investment income

	2017	2016
Portfolio investments - restricted for endowments	\$ 65,225	\$ 29,161
Portfolio investments - non-endowment	34,851	28,466
	\$ 100,076	\$ 57,627
Income capitalized to endowments	(40,469)	(5,835)
	\$ 59,607	\$ 51,792

17. Expense by object

	2017 Budget (Note 15)	2017	2016
Salaries	\$ 627,360	\$ 630,262	\$ 606,275
Employee benefits	121,801	117,579	116,479
Materials, supplies and services	265,316	284,664	278,132
Utilities	27,325	25,082	25,013
Maintenance and repairs	19,438	20,331	23,934
Scholarships and bursaries	83,267	96,837	91,417
Cost of goods sold	13,618	14,602	12,581
Amortization of tangible capital assets	116,095	124,432	118,993
	\$ 1,274,220	\$ 1,313,789	\$ 1,272,824

18. Funds held on behalf of others

The University holds the following funds on behalf of others over which the University's Board of Governors has no power of appropriation. Accordingly, these funds are not included in the University's consolidated financial statements.

	2017	2016
University of Calgary Medical Group	\$ 11,633	\$ 9,230
Alberta Gambling Research Institute	1,642	2,335
University Child Care Centre Society	1,473	1,130
State of Qatar	206	343
Canadian Institute of Resource Law	132	142
University Press	47	46
Others	63	278
	\$ 15,196	\$ 13,504

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
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(in thousands)**



19. Government of Alberta transactions and balances

The University operates under the authority and statutes of the Province of Alberta. Transactions and balances between the University and the Government of Alberta ("GOA") are measured at the exchange amount and summarized below.

	2017	2016
Grants from GOA		
Advanced Education:		
Operating	\$ 460,558	\$ 448,009
Capital	77,553	39,211
Research	18,184	16,303
Other	14,655	8,310
Total Advanced Education	\$ 570,950	\$ 511,833
Other post secondary institutions	\$ 2,592	\$ 2,958
Other GOA departments and agencies:		
Alberta Health	\$ 39,051	\$ 34,866
Other	62,238	60,718
Total other GOA departments and agencies	\$ 101,289	\$ 95,584
Total contributions received	\$ 674,831	\$ 610,375
Restricted expended capital recognized as revenue	60,813	61,545
Less: amounts received for endowment	(10,000)	(9,700)
Less: deferred revenues	(92,793)	(50,101)
Government of Alberta Grants	\$ 632,851	\$ 612,119
Accounts receivable		
Advanced Education	\$ 555	\$ 97
Other GOA departments and agencies	25,662	9,910
Other post secondary institutions	24	215
	\$ 26,241	\$ 10,222
Accounts payable		
Other GOA departments and agencies	\$ 2,624	\$ 2,389
Other post secondary institutions	333	17
	\$ 2,957	\$ 2,406

The University has debt with Alberta Capital Finance Authority as described in Note 9.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEAR ENDED MARCH 31, 2017
(in thousands)**



20. Salary and Employee Benefits

	2017			Total
	Base salary ⁽¹⁾	Other cash benefits ⁽²⁾	Other non-cash benefits ^{(3) (4)}	
Governance ⁽⁵⁾				
Chair of the Board of Governors	\$ -	\$ -	\$ -	\$ -
Members of the Board of Governors	-	-	-	-
Chancellor honorarium ⁽⁶⁾	-	5	-	5
Executive				
President ⁽⁷⁾⁽⁸⁾	480	116	301	897
Vice-Presidents:				
Provost and Vice President Academic	425	12	132	569
Vice President Development and Alumni Engagement ⁽⁹⁾	196	34	55	285
Vice President Facilities	315	12	85	412
Vice President Finance and Services	320	12	97	429
Vice President Research				
Incumbent ⁽¹⁰⁾	391	12	111	514
Acting ⁽¹⁰⁾	146	3	18	167
Vice President University Relations	282	12	86	380

	2016			Total
	Base salary ⁽¹⁾	Other cash benefits ⁽²⁾	Other non-cash benefits ^{(3) (4)}	
Governance ⁽⁵⁾				
Chair of the Board of Governors	\$ -	\$ -	\$ -	\$ -
Members of the Board of Governors	-	-	-	-
Chancellor honorarium ⁽⁶⁾	-	5	-	5
Executive				
President ⁽⁷⁾⁽⁸⁾	480	113	350	943
Vice-Presidents:				
Provost and Vice President Academic	413	12	146	571
Vice President Development and Alumni Engagement	280	40	75	395
Vice President Facilities	315	12	100	427
Vice President Finance and Services	320	12	109	441
Vice President Research	391	12	136	539
Vice President University Relations	282	12	95	389

1. Base salary includes pensionable base pay.
2. Other cash benefits include administrative honorariums, bonuses, relocation benefits, executive allowances and lump sum payments.
3. Other non-cash benefits include the University's share of all employee benefits and contributions or payments made on behalf of employees including pension, group life insurance, employee family assistance program, critical illness, supplementary health care, short and long-term disability plans, dental plan, professional memberships, supplemental retirement plan (per footnote (4)), accidental disability and dismemberment.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEAR ENDED MARCH 31, 2017
(in thousands)**



20. Salary and Employee Benefits (Continued)

4. Under the terms of the supplementary retirement plan ("SRP"), the executive may receive supplemental retirement payments. Retirement arrangement costs as detailed are not cash payments in the period but are period expenses for rights to future compensation. Costs shown reflect the total estimated cost to provide annual pension income over an actuarially determined post-employment period. The SRP provides future pension benefits to participants based on years of service and earnings. The cost of these benefits is actuarially determined using the projected benefit method prorated on services, a market interest rate, and management's best estimate of other assumptions. Net actuarial gains and losses of the benefit obligations are amortized over the expected remaining service life of each plan participant. Current service cost is the actuarial present value of the benefits earned in the current year. The components of the cost of the SRP include current service cost, amortization of actuarial gains and losses, past service costs on plan initiation, and interest accruing on the actuarial liability.
5. The Chair and Members of the Board of Governors receive no remuneration for participation on the Board.
6. An annual honorarium of five thousand dollars is paid to Chancellors who reside outside of the Province of Alberta.
7. The individual in this role received a vehicle allowance included in other cash benefits.
8. The individual in this role earned future administrative leave benefits during the year that have been included in other non-cash benefits.
9. The individual occupied this role for 8 months during the fiscal year. There was no individual in this role for 4 months during the fiscal year.
10. During the fiscal year, the Vice President Research Incumbent position was occupied for 6 months and on administrative leave for 6 months. During the Incumbent's administrative leave, the Vice President Research Acting position was occupied for 6 months.

The current service cost and accrued obligation for each executive under the SRP is outlined in the following table:

	Accrued Benefit Obligation March 31, 2016	Service costs	Interest costs	Actuarial loss (gain)	Benefits paid	Accrued Benefit Obligation March 31, 2017
President	\$ 753	\$ 131	\$ 27	\$ (54)	\$ -	\$ 857
Vice-Presidents:						
Provost and Vice President Academic	455	97	17	(18)	-	551
Vice President Development and Alumni Engagement	59	35	3	12	-	109
Vice President Facilities	126	58	5	(6)	-	183
Vice President Finance and Services	112	65	5	(5)	-	177
Vice President Research						
Incumbent	394	83	14	(15)	-	476
Acting	-	-	-	-	-	-
Vice President University Relations	257	51	9	4	-	321

The significant actuarial assumptions used to measure the accrued benefit obligation are disclosed in Note 8.

The current service cost and accrued obligation for the Administrative Leave is outlined in the following table:

	Accrued Benefit Obligation March 31, 2016	Service costs	Interest costs	Actuarial loss (gain)	Benefits paid	Accrued Benefit Obligation March 31, 2017
Administrative Leave	\$ 628	\$ 109	\$ 17	\$ (3)	\$ -	\$ 751

The significant actuarial assumptions used to measure the accrued benefit obligation for the Administrative Leave are based on a discount rate of 2.4% (2016 – 2.4%) and a yearly salary increase rate of 0% on July 1, 2017 and 3% per annum thereafter (2016 - 0% on July 1, 2016, 1.5% on July 1, 2017 and 3% per annum thereafter). An administrative leave benefit loading rate of 20% is applied.

21. Comparative figures

Certain comparative figures have been reclassified to conform with current year presentation.



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